

ASSESSMENT OF ZAMBIA'S PRIVATE SECTOR, AGRICULTURE & NATURAL RESOURCES SECTORS

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EXECUTIVE SUMMARY

The Zambian economy needs to grow at an annual rate of 6 to 8 percent if the country is to achieve its long-term goal of reducing poverty by half by the year 2015. This represents a significant challenge. The U.S. Agency for International Development (USAID) has financed a small, but effective economic growth program over the course of its current strategic plan (1998-2003). The program has focused on delivering support to increase agricultural and natural resource production, improve marketing and market linkages, and foster private sector development and capacity building for policy formulation for both the public and private sector. As the current strategic planning period draws to a close, the Mission has begun to review its efforts and launched a process that will result in a revised plan for the five-year period beginning October 2003. This assessment is part of that planning process.

Purpose and Structure of the Assessment

USAID/Zambia's contracted with Caribbean Resources International (CRI) and Grant Thornton Associates (GTA) to provide it with the information it requires "to contribute effectively to the design of a concept paper for USAID's next Country Strategic Plan (CSP)." This assessment focuses on three principal tasks. It examines the challenges confronting Zambia's growth; identifies opportunities and specific activities USAID should consider as it develops a new CSP; and it provides a preliminary strategic framework to guide the Mission's economic growth efforts during the five year period commencing October 2003.

The development challenges that Zambia confronts are considerable. Generally speaking, the country's macro-economic indicators are weak. It is one of the poorest and most heavily indebted countries in the world. Poverty is pervasive in both rural and urban areas. HIV/AIDS seroprevalence is estimated at between 19 and 22 percent nationwide, a factor which adds considerably to the challenges Zambia faces.

The assessment bases its conclusions and recommendations on the analyses of where opportunities to promote economic growth lie, and the factors that constrain those opportunities. The assessment team's findings, conclusions and recommendations for the private sector, agriculture, and natural resources are summarized below.

Private Sector

To date, USAID's support for the private sector has focused on improving the enabling environment. Zambia is fortunate to have a number of institutions that help promote dialogue between private sector actors, the GRZ, and the donor community. There appears to be a high degree of openness and dialogue between donors and the private sector in Zambia. USAID-funded activities in this arena, notably the Zambia Trade and Investment Enhancement project (ZAMTIE), deserve much credit for being responsive to requests for assistance. However, there is a risk that a completely demand-driven approach will spread the limited resources USAID has to invest in economic growth too thin. The assessment team concludes that the portfolio needs to have a tighter commodity and/or industry focus to have more impact. Among the priority areas for

policy analysis across commodity sectors or industries are the cotton and maize sub-sectors and the financial industry.

Here the financial sector deserves special attention. Many observers decry the inability of much of the private sector to access capital to expand operations as the most significant constraint on private sector growth. Through its support of Credit Management Services, USAID/Zambia is engaged in micro-finance. Although the program is worthwhile in that it addresses critical needs, USAID might better focus its limited resources for greater impact. The financial sector is populated with a diverse set of institutions, but there is little understanding of how they relate to one another. The assessment team recommends that before broadening its support within the micro-enterprise segment alone, USAID/Zambia should review the overall structure, conduct and performance of the entire financial sector. This would provide the foundation upon which to develop a longer-term financial sector development strategy.

In addition to policy analysis and reform, USAID should maintain and broaden its support for value-added agribusiness. The food, beverage and tobacco sub-sector accounts for approximately 60 percent of the country's manufacturing output. Future programs should work to help the industry diversify its product base while expanding its markets geographically.

The potential for the gemstone sub-sector of the mining industry presents a target of opportunity. However, the assessment team recommends that USAID develop any activities here in collaboration with other donors looking at the opportunities here.

Agriculture

With the long-term decline in the traditional copper mining sector, most observers of Zambia's development prospects recognize that agriculture must serve as the engine of the country's long-term economic growth. This makes strategic sense. Zambia uses only fourteen percent of its potentially arable land; so there is significant area in which to expand production. In addition, it has abundant water resources, and water may be the key constraint to agriculture globally in the 21st century.

Based on its findings and analysis, the assessment team recommends that USAID build upon its successful portfolio of activities in agriculture and concentrate its future resources on a few key tactics. The first priority should be to accelerate the rate at which capable farm families adapt conservation farming (CF) and conservation tillage (CT). Current estimates are that between 40 and 60,000 smallholder households practice these techniques and as a result realize significantly better yields. USAID should work closely with the other donors and the Conservation Farming Unit (CFU) of the Zambia National Farmers Union (ZNFU) to extend the CF and CT to 250,000 households, which knowledgeable sources estimate is the "saturation" point for adaptation.

Dairy industry development should be another high priority. Increased dairy production can address income and food security needs. The industry's growth and expansion also

can play a positive role in the effort to rebuild the cattle herds, which have been devastated by disease.

As mentioned, above, access to capital is a serious constraint on private sector development, including agriculture. Using warehouse receipts as a mechanism to improve a farmer's liquidity is a proven technique. A concerted effort to roll out the program that the Zambia Agricultural Commodities Association (ZACA) has in place should be another agricultural sector priority.

The current portfolio of USAID-funded activities has been instrumental in helping the agricultural sector diversify its product line. The development and expansion of floriculture, horticulture, and organic crops has helped provide income-earning opportunities for thousands of smallholders. According to knowledgeable sources, another crop that deserves serious attention is cassava. During colonial times it was critical to household food security. It also can be an industrial crop, providing the raw material for starch production. The nutritional aspects of cassava are controversial. Nevertheless, the assessment team strongly recommends that the Mission use the resources available to it to undertake a full analysis of cassava's potential to contribute to the accelerated growth of the agricultural sector.

The assessment team also recommends that USAID continue to support successful programs in horticulture, floriculture, and natural and organic crops, although there are some questions about the long-term growth potential of these sub-sectors. It is important not to overlook the traditional crops, which offer much greater potential for benefiting large numbers of producers.

Natural Resources

Zambia's wildlife and forestry assets, in particular, have the potential to generate income for vulnerable rural populations. But as is the case with any asset, Zambia needs coherently thought out and well-executed management plans for these assets to assure that they can generate income on a sustainable basis. If the *status quo* continues, there is significant risk that these assets will be depleted.

Based on the analysis of different approaches donor-funded programs take to support natural resources management in Zambia, the assessment team concludes that USAID has a vital role within the sector. It recommends that USAID support community-based natural resources management (CBNRM) programs to bring game management areas under close local control and supervision, and that it favor models that include sustainable agriculture component.

Geographically, the Kafue Flats and Bangweulu Swamps are two specific locations that should receive significant attention for natural resources development activities in the future. These are wetland areas and offer significant potential for income generating activities based on tourism and wildlife development.

Finally, the analysis identified serious institutional problems with the Zambia Wildlife Authority (ZAWA), which is a key institutional player in the sector. The assessment team believes that ZAWA requires and deserves donor assistance if it is to play its pivotal and legislatively mandated role.

Cross-cutting Themes

As noted earlier, Zambia faces significant development challenges that cut across the entire economic spectrum, if not the entire society. The high prevalence of HIV/AIDS has important implications for economic growth. It will be important that donors, including USAID, help their private sector stakeholders implement the SADC Model Code of Practice for addressing HIV/AIDS in the workplace. Care must also be given to accurately assess and account for the impact of the disease in designing interventions in rural areas.

Food security is another cross-cutting theme in Zambia. The high levels of poverty found in both rural and urban settings can be taken as a proxy for food insecurity. The primary focus of the new economic growth SO in this regard should be to increase the availability of food supplies. The assessment team believes that putting a high priority on efforts to get vulnerable smallholder households to adapt CF and CT techniques, which result in well-documented increases in yields, is an effective step in this process.

Preliminary Results Framework

Based on its analysis of the best opportunities to promote private sector, agriculture and natural resources development in Zambia, as well as its recommendations for the specific types of activities USAID should pursue over the period from 2003 to 2007, the assessment team developed a preliminary results framework. Given the successes achieved in economic growth under the current CSP, this preliminary framework represents a modest reorientation and restructuring of the strategy. Significant changes include: i) shifting the focus at the strategic objective level from household income to competitiveness; ii) including a separate intermediate result to improve the focus on the natural resources sector; iii) adding HIV/AIDS-specific indicators at the SO level and for IR 4, and iv) including an indicator to address food security issues under IR1.

The Preliminary Economic Growth Results Framework is presented overleaf.

SO: INCREASED COMPETITIVENESS OF PRIVATE SECTOR, ESPECIALLY AGRICULTURE AND NATURAL RESOURCE BASED ENTERPRISES, IN LOCAL, REGIONAL AND GLOBAL MARKETS.

Indicators:

Growth in agriculture sector's contribution to GDP.
Growth in agriculture and natural resource-based export.
Growth in agribusiness sector's contribution to GDP.

Growth in tourism's contribution to GDP.
Decrease in HIV/AIDS prevalence rates among 15-24 year olds.

IR1: Increased Smallholder Production of Commercial and Staple Crops

Indicators:

1.1 Number of farmers adapting improved technologies, disaggregated by gender and by persons living with HIV/AIDS (PLWHA). 1.2 Increased incomes of commercially oriented farmers, disaggregated by gender and by PLWHA.
1.3 Increased production of selected staple crops in target areas.

IR2: Expanded Market for Business Development Services (BDS)

Indicators:

2.1 Firms providing BDS.
2.2 Sales of BDS providers.
2.3 Access to finance.

IR3: Increased Community Control over and Income from Natural Resources

Indicators:

3.1 Area of game management areas under control of community-based organizations.
3.2 Households benefiting from income derived from community-based natural resources management activities, disaggregated by gender of household head and households affected by HIV/AIDS.

IR4: Improved Enabling Environment

Indicators:

4.1 Domestic investment in agriculture, agribusiness, and tourism.
4.2 Foreign direct investment in agriculture, agribusiness, and tourism.
4.3 Zambia's *Institutional Investor* ranking.
4.4 Zambia's *Transparency International* ranking.
4.5 Businesses adopting SADC HIV/AIDS Code of Conduct, as relevant to business size.

CRITICAL ASSUMPTIONS

1. Government of Zambia remains firmly committed to making agriculture and natural resources the engine of economic growth.
2. Current drought ends and rainfall patterns return to normal.
3. Investments under PRSP begin to address the major problems in infrastructure that constrain agriculture and natural resources sector growth and development
4. Political and economic stability in region provides a level playing field for increased trade
5. Government policies lead to macro-economic stability, reduced borrowing leads to lower interest rates.
6. HIV/AIDS prevalence levels decrease or stabilize.

Assessment of Zambia's Private Sector, Agriculture & Natural Resources Sectors

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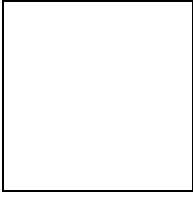
LIST OF ACRONYMS

ACF	Agricultural Consultative Forum
ACP	Agricultural Commercialisation Programme
ADB	African Development Bank
ADMADE	Administrative Management Design
ADSP	Agricultural Development Support Programme
AGOA	African Growth and Opportunities Act
AMDA	Association for Medical Doctors
AMIZ	Micro Finance Association of Zambia
ASIP	Agriculture Sector Investment Programme
ASNAPP	Agribusiness in Sustainable Natural African Plant Products
ASP	Agricultural Support Programme
ATF	Agricultural Trade Forum
BDS	Business Development Services
BOZ	Bank of Zambia
CBs	Commercial Banks
CBNRM	Community-based Natural Resources Management
CETZAM	Christian Enterprise Trust of Zambia
CF	Conservation Farming
CFU	Conservation Farmers Union
CLUSA	Co-operative League of the United States of America
CMS	Credit Management Services
COMESA	Common Market of Eastern and Southern Africa
CONASA	Community-based Natural Resources Management and Sustainable Agriculture
CSO	Central Statistical Office
CSP	Country Strategic Plan
CT	Conservation Tillage
DA	Development Assistance
DBAs	District Business Associations
DBZ	Development Bank of Zambia
DC	District Council
DCA	Development Credit Authority
DFID	Department for International Development
DWA	Department of Water Affairs
ECLF	Ecumenical Church Loan Fund
ECZ	Environmental Council of Zambia
EDF	Enterprise Development Fund
EEOA	Economic Expansion in Outlying Areas
EG	Economic Growth

EGAT/MD	Economic Growth, Agriculture and Trade/Microenterprise Development
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FEWSNET	Famine Early Warning Systems Network
FMU	Financial Management Unit
FOB	Freight on Board
FRA	Food Reserve Agency
FSSMSE	Financial Support to Small and Medium Scale Enterprises
FSRP	Food Security Research Project
FTAs	Free Trade Areas
GART	Golden Valley Agricultural Research Trust
GATT	General Agreement on Tariff and Trade
GDP	Gross Domestic Product
GMA	Game Management Area
GMO	Genetically Modified Organism
GRZ	German aid agency
GRZ	Government of the Republic of Zambia
GTA	Grant Thornton Associates
GWH	Giga Watts per Hour
Ha	Hectare
HIPC	Highly Indebted Poor Country
HPN	Health, Population, Nutrition
IDA	International Development Association
IESC	International Executive Services Corporation
IFAD	International Fund for Agricultural Development
IFC	International Financial Corporation
ILO	International Labor Organization
IMF	International Monetary Fund
IR	Intermediate Result
IRIS	Institutional Reform and the Informal Sector
IQC	Indefinite Quantity Contract
JICA	Japanese International Cooperation Agency
JV	Joint Venture
LASF	Local Authority Superannuation Fund
LFSP	Livingstone Food Security Programme
LIBOR	London Interbank Offer Rate
LUSE	Lusaka Stock Exchange

MAC	Ministry of Agriculture and Cooperatives
MAFF	Ministry of Agriculture, Food and Fisheries
MBT	Micro Bankers Trust
MCRF	Marketing Credit Management Programme
MCTI	Ministry of Commerce Trade and Industry
MTENR	Ministry of Tourism, Environment and Natural Resources
MEWD	Ministry of Environment and Water Development
MFIs	Micro Finance Institutions
MIGA	Multilateral Insurance Guarantee Agency
MMD	Movement for Multiparty Democracy
MSME	Micro-, Small-, and Medium-Enterprises
MW	Megawatt
NAIS	National Agricultural Information Service
NAMBOARD	National Agricultural Marketing Board
NAO	National Authorization Office
NAPSA	National Pension Scheme Authority
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
NSCB	National Savings and Credit Bank
NTEs	Non-Traditional Experts
NWASCO	National Water and Sanitation Council
OAU	Organization of African Unity
OPPAZ	Organic Producers and Processors Association of Zambia
Pa	Per Annum
PFAP	Provincial Forestry Action Plan
PFI	Participating Financing Institution
PHI	Presidential Housing Initiative
PLWHA	Persons Living With HIV/AIDS
POTO	Producer Owned Trading Organization
PRIDE	Promotion of Round Initiative and Development Enterprises
PRSP	Poverty Reduction Strategy Paper
PSDP	Private Sector Development Programme
PULSE	Peri Urban Lusaka Small Enterprise
PwC	PricewaterhouseCoopers
RCSA	Regional Center for Southern Africa
RGB	Rural Group Business
RIF	Rural Investment Fund
ROADSIP	Road Sector Investment Programme
SACU	South Africa Customs Union
SADC	Southern Africa Development Community
SARRNET	Southern Africa Regional Research Network
SHAPES	Smallholder Access to Processing and Seed

SHEMP	Smallholder Enterprise and Marketing Programme
SIDA	Swedish International Development Agency
SLAMU	South Luangwa Management Unit
SMEs	Small and Medium Enterprises
SO	Strategic Objective
SPA	Sector Performance Analysis
TA	Technical Assistance
TAZARA	Tanzania Zambia Railway
TB	Treasury Bills
TCZ	Tourism Council of Zambia
TESF	Trade Enterprise Support Facility
UNAIDS	Joint UN Programme on HIV/AIDS
UNDP	United National Development Programme
USAID	United States Agency for International Development
VAT	Value Added Tax
WRAP	Water Resources Action Programme
WSS	Water Supply and Sanitation
WTO	World Trade Organization
WWF	World Wildlife Federation
ZACA	Zambian Agricultural Commodity Authority
ZACCI	Zambia Chamber of Commerce and Industry
ZAM	Zambian Association of Manufacturers
ZAMTEL	Zambia Telecommunication
ZAMTIE	Zambia Trade and Investment Enhancement Project
ZANU	Zambia National Farmers Union
ZATAC	Zambia Agri-business Technical Assistance Centre
ZAWA	Zambia Wildlife Authority
ZCCM	Zambia Consolidated Copper Mines
ZCSMBA	Zambia Chamber of Small and Medium Business Associations
ZESCO	Zambia Electricity Supply Corporation
ZFAP	Zambia Forestry Action Plan
ZMK	Zambian Kwacha, the national currency
ZNBS	Zambia National Building Society
ZNCB	Zambia National Commercial Bank
ZNFU	Zambia National Farmers Union
ZNFU-CFU	Zambia National Farmers' Union – Conservation Farming Unit
ZPA	Zambia Privatisation Agency
ZRA	Zambia Revenue Authority
ZSCB	Zambia Savings and Credit Bank
ZSIC	Zambia State Insurance Corporation Limited



CHAPTER 1: INTRODUCTION

This chapter provides, in brief, the background for the assessments of the private sector, agriculture and natural resources sectors. It reviews the objectives as provided in the Statement of Work. Finally, it describes the methodology the assessment team used to prepare this report.

1.1 Background

Over the period 1998 – 2003, USAID/Zambia has been focusing on delivering support to programs in agricultural and natural resource production, marketing and market linkages, private sector development and capacity building for policy formulation for both the public and private sector. Activities include provision of production technologies, business training, credit and credit linkages and policy reforms. Beneficiaries include rural and peri-urban families, the Government of the Republic of Zambia (GRZ), business advocacy groups and agribusinesses. The current economic growth program funds are Development Assistance (DA) resources and include Environment, Agriculture and Microenterprise earmarks.

As the period covered by the Mission's current Country Strategic Plan (CSP) draws to a close, the Economic Growth Team (Strategic Objective 1, or SO1), as are all the Mission's strategic objective teams, is reviewing its efforts and planning for the five-year period beginning 1 October 2003. This assessment contributes to the SO1 Team's strategic planning process and builds upon the findings of a day-long workshop the team had with its stakeholders in May 2002 and the recently released "contextual" study.¹

1.2 Objectives

The overall objective of this assessment is to provide the SO1 Team with the information it requires to contribute effectively to the design of a concept paper for USAID's next CSP. The Statement of Work for this assessment sets forth three primary objectives. It attempts to:

- (i) Define challenges confronting Zambia's economic growth. It identifies the factors constraining growth of the private sector and agriculture and natural resources sectors and examines their root causes.
- (ii) Identify opportunities and recommend specific economic growth activities the SO1 should consider, in the context of the current and planned activities of other donors.
- (iii) Recommend future strategic options, mechanisms to facilitate and accelerate sustainable economic growth in Zambia and develop a results framework in the context of earmarks and resource constraints.

Annex A provides the entire Statement of Work.

¹ See Development Alternatives, Inc. 2002. *The Development Context of Zambia: An Update and Analysis, with Lessons Learned and Recommendations for USAID's Next Strategy Plan*. July, 2002.

1.3 Methodology

Two principle sources of information provide the basis for this report. The assessment team reviewed and analyzed a substantial volume of documentation. (See Annex B, Selected Documents Reviewed). The SO1 Team was a major contributor to the team's library. In addition it received additional documents, including studies, project descriptions and interim reports, and evaluations from other sources. Key informant interviews provided the team's second major source of data and information. The team members used a structured interview approach to guide their interactions with key informants in the GRZ, donor agencies and international executing agencies, the private sector, current SO1 contractors and grantees, and local and international non-governmental organizations (NGOs). (Annex C provides a list of individuals and organizations contacted in the course of this assessment.)

CHAPTER 2: SUMMARY COUNTRY CONTEXT

As is well known and documented, Zambia is one of the poorest countries in the world. It faces numerous macro-economic and social development problems. In the most recently released (2002) Human Poverty Index, the United Nations Development Programme (UNDP) ranked the country 153rd out of a total 173 countries. The persistence and severity of poverty is high. Poverty is more widespread in rural areas of the country, but poverty levels in urban areas are dramatic. In addition, the high incidence of HIV/AIDS only adds to the challenges Zambia faces.

The purpose of this chapter is to set the broad context for the sector assessments that follow. It provides but a cursory view of the macro-economic and social setting under the assumptions that most readers will have a deep understanding of the country's development context. For more detailed information, readers are advised to review the GRZ's Poverty Reduction Strategy Paper (PRSP) and USAID's recently completed "contextual" study.²

Table 2.1 provides an eleven-year perspective of broad economy trends and the country's efforts to achieve substantial economic growth.

Table 2.1: Key Macroeconomic Indicators: 1991 – 2001
(US\$ Millions, unless otherwise indicated)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Growth Rate (%)	-0.7	2.0	-0.1	-13.3	-2.3	6.5	3.5	-2.2	2.4	4.0	5.2
Per capita GDP (\$)	443	436	435	378	357	371	376	357	356	360	
Exchange Rate (ZMK/\$)	65	172	453	669	864	1 208	1 315	1 862	2 388	3 111	3 608
Inflation (%)	97.7	165.7	183.3	54.6	34.9	43.1	24.4	24.5	26.8	22.3	18.7
Gross investment	11	12	15	13	13	15	14	14	18	19	
Gross national savings	11	8	14	10	12	9	9	8	4		
Trade Balance	133	-218	-24	64	-8	-62	-27	-153	-149	-221	
Exports, f.o.b.	1085	1133	994	1 066	1 186	993	1 191	816	756	746	871
Imports, f.o.b.	-952	-1351	-1 019	-1 003	-1 194	-1 055	-1 128	-971	-922	-978	-1 253
Current account balance	8	-135	-30	-47	-146	-122	-239	-574	-532	-583	-743
Direct Investment								198	163	126	
Total External Debt		4 981	5 102	6 397	7 041	7 085	6 971	6 613	5 670	5 669	7 270

Source: International Monetary Fund statistical annex; and Central Statistical Office

Growth Rate: Zambia needs to grow its economy at a rate of 6-8 percent if it is to achieve its broadest long-term goal of cutting the poverty rate in half by 2015. As the table indicates, recent performance has not been up to this challenge. Given problems in

² Development Alternatives, Inc. 2002. *The Development Context of Zambia: An Update and Analysis, with Lessons Learned and Recommendations for USAID's Next Strategy Plan*. July.

copper industry growth expectations have been scaled back. As a result, the performance for the past two years – 2002 and 2001 – has been deemed acceptable. However, this two year performance is not enough to meet the country's longer-term goals. This relatively good economic performance has been attributed to improvements in sectoral performances especially the mining sector which registered growth of 14 percent in 2001 as opposed to only 0.1 percent in 2000. However, problems in 2002 are causing some to reduce their growth forecasts for the short-term. In 2001, Zambia also benefited from an increase of tourism revenue as a result of business switching away from Zimbabwe. However, the overall implication remains unchanged. That is the non-mining sectors of the economy, and agriculture in particular, need to achieve rapid rates of growth to meet these longer term goals.

Gross Domestic Product (GDP) per Capita: With a GDP per capita at US\$360 in 2000, Zambia among the poorest nations in the world.

Exchange Rate: The decline in the value of the Zambian kwacha (ZMK) has been dramatic over the past decade. The main factors contributing to this depreciation in recent years include: (i) a weaker than expected overall external position; (ii) an increase in demand for dollars stemming from a loss in market confidence in the kwacha, as inflation accelerated; (iii) monetary expansion beyond program estimates; and (iv) possibly, political instability in the region.

Inflation: Although it has declined dramatically from the triple digit rates of a decade ago, the rate of inflation remains persistently high. As measured by changes in the Consumer Price Index, inflation declined from 26.8 percent in 1999 to 22.3 percent in 2000 and to 18.7 percent in 2001. Among other impacts, the high rate of inflation is a drag on the investment Zambia needs to achieve its long term target growth rates.

Investment: The share of total investment in GDP has been increasing steadily from 11 percent in 1991 to 16.2 percent in 2000. To achieve its longer-term growth targets, investment should be on the order of 20 percent of GDP. While at one time there was the hope that the privatization of the mining sector might spur investment, this is no longer the case. It will be investment in the country's non-mining sectors that will fuel its longer-term growth and development.

External Debt: Zambia has an exceptionally high debt burden. In 2001 total external debt US\$7.3 billion. In rough figures that is over US\$700 per capita or about twice the per capita GDP. That is a staggering figure. Towards the end of 2000, Zambia became the eleventh country to obtain debt relief under the enhanced International Monetary Fund's (IMF) Highly Indebted Poor Country (HIPC) program. Debt relief under HIPC will finance a significant portion of Zambia's investment program, as incorporated in the PRSP.

Fiscal Performance: The fiscal performance in recent years has not achieved plan. Although overall expenditures were broadly in line with program projections, revenue and grants fell short of the program target (largely because of 2.2 percent of GDP

shortfall in grants) and as a result, the overall fiscal deficit was higher than anticipated. The domestic fiscal deficit, at 3.4 percent of GDP, was also higher than the program estimate.

Interest Rates: High real and nominal rates of interest are another serious drag on Zambia's ability to grow economically. Although short-term lending rates have declined dramatically from the triple digit figures registered in the early 1990s, they remain high, i.e. 40 to 45 percent. This creates an economic environment in which it is difficult to accelerate business formation. The charges that the commercial banks are content make its money on Government debt securities rather than lending to the private sector are pervasive.

Poverty: Poverty is widespread and persistent in Zambia. The PRSP reproduces data from the country's Central Statistical Office (CSO) that are staggering. It notes that "Between 1996 and 1998, poverty levels rose for all groups except large-scale farmers . . . The small-scale farmers remain one of the poorest groups in Zambia." According to the CSO's survey of *Living Conditions in Zambia 1998*, the overall level of poverty increased from 69.7 to 72.9 percent of the population between 1991 and 1998. This change was the net result of a decrease in incidence of rural poverty from 88.0 to 83.1 percent, while poverty among urban dwellers rose from 48.6 to 56.0 percent over the same period.³ Given the recent drought and food shortages, it is reasonable to assume that poverty levels have not improved since the 1998 survey.

HIV/AIDS: No overview of Zambia is complete without addressing the problem of HIV/AIDS. According to the Ministry of Health and the Joint United Nations Programme on HIV/AIDS (UNAIDS), national prevalence levels are estimated between 19 and 22 percent. As summarized by USAID/Zambia, however, there is reason for cautious optimism:

Recent analyses of age-specific prevalence levels show encouraging trends among 15- to 19 year-olds and 20- to 25-year-olds. Between 1993 and 1998, there was a 42 percent decline in HIV seroprevalence among Zambian youth 15 to 19 years old. ... National behavioral surveillance data indicate a reduction in reported casual sexual behavior from 17 percent in 1996 to 11 percent in 1999 ... There has also been a marked increase in condom use ...⁴

In spite of these recent positive trends, HIV/AIDS will continue to pose a significant constraint to Zambia's economic growth for many decades to come. Among many other factors, it: decreases the labor supply for agricultural, natural resource, manufacturing, and most other sectors; reduces enterprise profitability by both increasing the cost of production (where health care and other social benefits are factored in) and decreasing

³ The "Central Statistical Office (CSO) determines the poverty line as the amount of monthly income required to purchase basic food to meet the minimum caloric requirement for a family of six." PRSP, Page 23.

⁴ "HIV/AIDS in Zambia A USAID Brief," July 2002, available from www.usaid.gov, Zambia country page.

the productivity of workers; and increases investor uncertainty and creates an atmosphere less conducive to investment in general.

Addressing HIV/AIDS is also critical to Zambia's eligibility for the benefits of the African Growth and Opportunities Act (AGOA). AGOA states that the President of the US must conduct an annual review of eligibility status and must terminate such status if a country is not making continual progress toward meeting the eligibility criteria. Criteria include continued progress toward a market-based economy, the rule of law, free trade, economic policies that will reduce poverty, and the protection of workers' rights. Zambia has maintained its eligibility for two years. However, given the direct linkages between HIV/AIDS and poverty, and issues related to stigma and discrimination of persons (including workers) living with HIV/AIDS, continued attention to the relationship of HIV/AIDS and economic growth is merited.

CHAPTER 3: PRIVATE SECTOR

3.1 Sector Overview

The private sector has undergone substantial change as Zambia has made the transition from a socialist to a liberalized market economy. Table 3.1 provides a summary of the relative contribution of different economic activities to Zambia's economy over the last seven years, with more discussion of some of the key contributors provided in section 3.1.1 below. As the table indicates, the most significant change in the period has been mining's continued decline in overall importance and the increasing relative importance of most of the other sectors. This has led to a more balanced and diversified economy overall, which should prove more durable in the long-term.

Table 3.1: Percent Contribution to GDP by Activity 1996-2002

Kind of Economic Activity	1996	1997	1998	1999	2000	2001 ⁵	2002 ⁶
Wholesale & Retail Trade	17.0	17.2	18.1	18.5	18.3	18.4	18.4
Agriculture, Forestry & Fishing	17.2	15.8	16.3	17.5	17.2	15.9	15.6
Manufacturing	9.9	10.1	10.5	10.5	10.5	10.6	10.7
Real Estate and Business Services	6.1	6.6	7.6	8.4	9.5	9.4	9.6
Financial Intermediaries and Insurance	8.6	8.3	8.5	8.6	8.2	7.8	7.6
Mining and Quarrying	12.0	11.8	9.0	6.6	6.4	7.0	7.2
Transport, Storage and Communications	5.8	5.6	6.2	6.4	6.3	6.2	6.1
Construction	4.1	5.1	4.8	4.8	4.9	5.2	5.4
Electricity, Gas & Water	2.9	2.9	3.0	3.0	3.0	3.0	3.2
Restaurants, Bar and Hotels	1.8	1.8	1.9	1.9	1.9	2.3	2.4
Others ⁷	14.6	14.8	14.1	13.8	13.8	14.2	13.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Central Statistical Office, percentages computed.

What the table does not show is the relative contribution of the public and private sector in each type of activity. As discussed below, although the private sector's reach is expanding, the state still plays a prominent role in several key sectors, especially electricity, gas and water; and communications. It also controls major operations in the financial sector.

3.1.1 Major Sectors of Economic Activity

Wholesale and Retail Sector

The wholesale and retail trade sector surpassed agriculture as the single largest component of GDP in 1997, and in 2001 accounted for 18.4 percent of the country's economic activity.

⁵ Preliminary based on partially available data, likely to undergo revision

⁶ Data for 2002 are projections

⁷ Others include community, social and personal services; public administration and defence, public & sanitary services; education; health, recreation; religious; culture; and personal services

Agriculture, Forestry, and Fishing

The agriculture, forestry and fishing sector ranks second in overall importance. The recent poor weather is a major factor driving its decent decline. Chapter 4 examines this sector in detail.

Manufacturing Sector

The manufacturing sector's contribution to GDP has increased marginally over the past five years, from 9.7 to 10.6 percent. The sector employs about 11 percent of Zambia's total formal workforce of 470,000. As Table 3.2 indicates, value-added processing of the country's agricultural output dominates the manufacturing sector.

Table 3.2: Manufacturing's Contribution to GDP, Percentage by Sub-Sector

Manufacturing Sub-sectors	1996	1997	1998	1999	2000	2001	2002
Food, Beverage & Tobacco	6.2	5.8	6.2	6.4	6.2	n.a	n.a
Textile & Leather Industries	1.2	1.6	1.8	1.9	1.8	n.a	n.a
Wood & Wood Products	0.8	0.8	0.8	0.	0.8	n.a	n.a
Metals, Chemicals, Rubber & Plastics	0.9	0.9	0.8	0.8	0.8	n.a	n.a
Paper & Paper Products	0.2	0.3	0.3	0.3	0.3		n.a
Non-metallic Mineral Products	0.2	0.2	0.2	0.2	0.2	n.a	n.a
Basic Metal Products	0.1	0.1	0.1	0.1	0.1		n.a
Fabricated Metal Products	0.3	0.3	0.3	0.2	0.3	n.a	n.a
Other Manufacturing	0.02	0.02	0.02	0.02	0.02	n.a	n.a
Total Manufacturing	9.9	10.1	10.5	10.5	10.5	10.6	10.7

Source: Central Statistical Office, percentages computed.

Key sub-sectors in the manufacturing sector are:

- *Food, Beverages and Tobacco*
In 2002, the food, beverage and tobacco sub-sector accounted for over 60 percent of manufacturing. The private sector, including privatized companies such as *Zambian Breweries*, *National Milling* and *Zambia Sugar*, and foreign firms dominate this sub-sector.
- *Textile and Leather*
Textile and leather processing rank second in importance. Several large firms dominate the textile industry, which adds value to cotton, one of Zambia's major crops.
- *Wood and Wood Products*
Zambia has rich forest resources that supply the wood and wood products manufacturing sub-sector
- *Fabricated Metal Products, Chemicals, Rubber and Plastic Products*
The manufacturing of metals, chemicals, rubber and plastics accounts for less than 1 percent of GDP. There is the potential to grow by adding value to the country's mineral assets.

- *Paper and Paper Production*

This sub-sector is small. Its contribution to GDP is negligible at 0.3 percent. Most of the paper used in Zambia is imported.

Real Estate and Business Services

The real estate and business services sub-sector has been fastest growing segment of the Zambian economy over the past five years. Its contribution to GDP has increased over fifty percent, from 6.1 percent in 1996 to 9.5 percent in 2001.

Financial Intermediaries and Insurance

The slight decline in the financial industry's contribution to GDP since 1996 reflects the problems the sub-sector has confronted. The sub-sector is broad, ranging from the central bank (the Bank of Zambia), to the big players regulated by the Banking and Financial Services Act, to the numerous microfinance institutions, which are often unregulated and mostly supported by donor funds. In between are nine commercial banks, two merchant banks, a national savings bank, and various insurance companies and pension funds.

Mining and Quarrying

Zambia has 6 percent of the world's copper deposits and is the world's fourth largest copper producer. It also has important deposits of cobalt, uranium, gold, nickel, lead, zinc, iron and manganese. Historically, mining has contributed 70 percent of the total country's foreign exchange earnings. Over the last two decades, however, copper's importance has diminished due to falling world market prices and poor management practices. Since 1996 its share of GDP has declined from 12 to 7 percent. The sub-sector's share of export earnings has dropped from 70 to 50 percent of total export. Mining accounts for 40,000 jobs, i.e. about 8.5 percent of the salaried workforce.

Large-scale mining is active in copper, cobalt, and coal, while small-scale mining is active in a variety of gemstones that include emeralds, amethyst, aquamarine, tourmaline, garnets and citrine. Emeralds are by far the most dominant. This rich variety of mineral resources offers great potential to provide the needed resources for financing development and poverty reduction. However, the mining deposits are located in undeveloped and remote parts of the country and their exploitation inevitably leads to the development of access roads, telecommunications, and other physical and social infrastructure such as schools and clinics.

Transport, Storage and Communications

The waiving of import duty and sales tax on passenger transport by the Government in 1995 increased activity in the road transport sector. Since 1995, the road transport sector has continued to perform well. Government still plays a substantial role in communications.

Construction

Since 1996 construction's share of GDP has grown modestly. The key factors responsible for this include work on the Presidential Housing Initiative (PHI), which began in 1999,

and road construction financed under the Road Sector Investment Programme (ROADSIP).

3.1.2 Non-traditional Exports

Given the small size of the domestic market, it is generally recognized that the ability to export will be a major factor in Zambia's growth. As mentioned earlier, export earnings from the mining sector have declined substantially. Growth will have to come from so called "non-traditional" exports (NTEs). Table 3.3 provides a summary of these exports.

Table 3.3: Major Non-Traditional Exports, 1995-2001 (US\$ Millions, F.O.B)

	1995	1996	1997	1998	1999	2000	2001
Primary Agriculture	24.0	37.8	90.9	62.2	72.5	37.1	51.4
Processed Food, Etc	25.2	33.8	30.9	49.4	33.0	35.6	43.0
Textiles	39.1	40.4	50.6	42.3	37.0	36.0	34.1
Floricultural	13.5	18.2	21.2	32.9	42.7	33.9	34.1
Horticultural	4.0	8.8	15.9	20.6	23.9	27.4	36.4
Engineering	39.4	36.5	42.4	31.7	23.2	20.6	21.3
Gemstones	7.5	10.8	14.5	11.6	13.8	15.4	20.3
Other	0.5	1.4	3.0	3.0	6.5	4.4	9.2
Building	5.2	7.9	12.0	8.6	10.2	8.7	7.1
Chemical	2.4	3.1	7.8	6.9	5.9	7.0	6.0
Leather	1.9	2.1	2.2	3.1	2.0	4.3	3.9
Wood Products	1.4	1.8	3.4	3.2	3.0	3.8	3.8
Animal Products	1.4	1.7	3.4	4.2	4.4	3.3	3.1
Petroleum Oils	11.3	5.7	1.8	6.8	6.4	0.4	1.6
Non-Metallic	0.7	0.6	0.5	0.5	1.0	1.1	0.9
Handicrafts	0.1	0.2	-	0.2	0.2	0.3	0.2
Garments	-	0.1	0.2	0.4	0.4	0.4	0.2
TOTAL EXPORTS	178.1	211.6	304.8	287.7	286.	239.8	276.5

Sources: EBZ Exporter Audits 1995-2001, Bank of Zambia.

Chapter 4 that follows provides a situational analysis of the leading non-traditional export sector, primary agriculture. Some parameters of the other leading sectors are briefly summarized below.

Processed Foods

Sugar accounted for US\$37 million of total processed food exports of US\$43 million recorded in 2001. In 2000, sugar accounted US\$22 million of total exports in this category of almost US\$36 million. The major player here is Zambia Sugar. Other major contributors in this product category include millers, responsible for the production of mealie-meal, stock feeds and flour, honey and bees wax, cooking oil, carbonated soft drinks. Tomato pastes, jams, peanut butter, and dried fruits and vegetables are of lesser importance. The exports of mealie meal and stock feeds which are bi-products of the milling process dropped because of the ban on exports of mealie meal and the low production from milling firms as a result of inadequate maize stocks.

The exporting companies are mostly located along the line of rail, particularly Lusaka and the Copperbelt. Only North Western Bee Company (exporters of honey and beeswax) are in a rural area, whilst milling companies tend to be located in urban areas.

Textiles and Garments

Zambia's exports of textiles and garments dropped 6 percent in 2001 to US\$34 million. The drop in sales was attributed to reduced sales to Tanzania, which quit COMESA, and the loss of market share in Europe. European export markets such as Germany and Switzerland. The export trend in this sector has been declining in the past four years generally due to Asian economic crisis of 1997.

The main export markets in order of size are Germany, Switzerland, UK, Belgium, South Africa and Tanzania. Others are Zimbabwe, Spain, Malawi, Portugal, Mauritius, Congo DR, Botswana and Italy. The largest exporting company in this sector is Swarp Spinning Mills, which exports cotton yarn. Other exporters are Mukuba Textiles (cotton yarn), Zambia-China Mulungushi Textiles (JV) Ltd (chitenge and garments), Sakiza Spinning Mills (acrylic yarn) and Kabwe Industrial Fabrics (polypropylene and polyethylene bags and cloth).

The industry has yet to take advantage of opportunities offered through AGOA.

Leather and Leather Products

Exports of leather and leather products declined from US\$4.3 million in 2000 to US\$3.9 million in 2001. The stagnation in the contribution of leather exports to NTEs is attributed to a critical shortage of raw hides and skins for use in tanneries and lack of investment capital for enhancement of production capacities.

Italy was the main destination for Zambia's leather exports during 2001. Other important markets include South Africa, Japan and Singapore for crocodile skins; Hong Kong and Switzerland for wet blue hides, and Malawi, Congo DR and Zimbabwe for footwear. Exports also go to United Kingdom, Kenya, Uganda and Botswana. The top exporters in this sector in 2001 were Zongwe Farming Enterprises, Kembe Estates and Malar Estates.

Wood Products

In 2001, the wood and wood products recorded total export earnings of US\$3.8 million, which represents a marginal decline of -3.3 percent as compared US\$3.89 million in 2000. There are two components to this market: softwood and hardwood. The softwood component exports approximately 30 of its production⁸. Companies producing hardwood timber based products such as rough sawn timber and railway sleepers export about 60 percent of their production.⁹

The Republic of South Africa has been the largest importer from Zambia. It accounted for 36 percent of exports in 2001. The other main regional export markets include Zimbabwe (13%), Botswana (12%), Tanzania, Malawi, Namibia and Swaziland.

⁸ Export Board of Zambia, Annual Audit Report 2001

⁹ Ibid

The U.S. has emerged recently as an important market. It accounted for 33 percent of 2001 exports.

3.1.3 Major Constraints to Private Sector Growth in Zambia

Zambia's ability to grow economically and expand its export earnings are constrained by a number of factors. Interviews with key private sector operators, donors, Government officials and other stakeholders provide the basis for the brief summaries of the major constraints, which follow.

Human Resources

HIV/AIDS has become a serious problem for both private and public institutions. As noted in Chapter 2, the national HIV/AIDS prevalence rate is between 19 and 22 percent. Although statistical data are not available on the private sector alone, many workers -- including professionals -- are dying. Recent studies have shown that HIV/AIDS can be expected to affect private sector firms in several ways: increased sick leave and absenteeism; high medical expenses; lower productivity; higher worker turnover; loss of highly skilled managers; increased training costs and increased expenditure on health and death benefits¹⁰. In combination, these result in higher unit costs and decreasing competitiveness of Zambian business.

Another major constraint on human resources is the lack of capacity in many institutions in Zambia. This is not only common in micro-, small-, and-medium enterprises (MSMEs), but also even in Government and private sectors. Firms large and small lack adequate skills in management, accounting, production, marketing and entrepreneurship skills and hence require training.

Cultural Constraints

Major cultural constraints include existence of negative attitude in producers and traders, which is a function of pre-1991 structure, i.e. people who believed in socialist principles. Such people expected the Government to grant subsidies for their living. The welfare institutions are under pressure to provide services to such people. There is also lack of a culture of entrepreneurship. Some companies make manpower appointments not on merit but by relationship and this affects productivity.

Business Practices

Interviewees identified a number of common business practices as constraints. They felt that the private sector was not well organized and coordinated and was consequently unable to speak with one voice, for examples, when negotiating with the Government on matters of policy affecting the operations of their businesses. Some companies and individuals have failed to adapt new business procedures and practices as the liberalized economy develops. Failure to change may affect the operations of these companies. Some individuals fail to honor loan obligations. Most traders were engaged in similar

¹⁰ Mwene Mwinga, 23rd November, 1995, Study on Risk Factors caused by HIV/AIDS. A study done for the National AIDS/STD/TB and Leprosy Program (NASTLP)

businesses or selling similar products which made business linkages difficult. Delays in Value Added Tax (VAT) refunds due from the Zambia Revenue Authority (ZRA) that take more than the stipulated 30 days adversely affect companies' cash-flows.

Access to Capital

Access to capital is a well-recognized constraint on private sector growth. Commercial banks have the reputation of being unwilling to lend to most businesses, and small and medium enterprises (SMEs) in particular, due to their assessment of risk and the inability of potential borrowers to provide collateral. The commercial banks can make adequate profits lending to the Government on a short-term basis, which is very low risk. The high cost of capital deters some potential borrowers. Currently, short-term rates are 40 to 45 percent. However, there are some very small firms that apparently are able to sustain high borrowing costs and operate successfully. As discussed in more detail later in the chapter, Credit Management Service lends to micro- and small- enterprises at annualized rates approaching 100 percent. Its clients have no other alternative source for debt capital. For them having access to capital is essential, even if it is expensive.

Neither market forces nor appeals to the good-will of banks will fundamentally alter the pattern of growing culture of reluctance by banks providing finance to SMEs and other development activities; and, rapidly increasing service charges, especially on service accessed by lower income clients and providing small loans at very high rates of interest to persons excluded from banks credit.

Transaction Costs

Respondents believed that transaction costs were unreasonably high. Commercial banks weighed lending rates have remained high for many years. Although these rates have gradually reduced from 139.5% (1993) to 45% (2001) and inflation rate has declined from 26.8% (1999) to 18.7% (2001), the changes are still very high.

Respondents also believed that absence of a one-stop-centre in Zambia also discouraged investors. An investor has to pass through many Government ministries to obtain an investment license. The system is costly and bureaucratic to investors. In addition, investment incentives are not well coordinated.

Further, taxation is high and the Zambia Revenue Authority (ZRA) delays Value Added Tax (VAT) refunds by more than the agreed 30 days thus tying up firms' cash-flows in delayed funds.

Infrastructure

The state of peri-urban and rural infrastructure as well as communication systems is poor. Roads, telecommunications facilities, electricity and clean water supply are lacking in some of the production areas for gemstones, agribusiness and to some extent manufacturing.

In the case of electricity, the Zambian industry has continuously complained about high electricity tariffs. These have contributed to the high production costs making Zambian products uncompetitive locally and abroad. However, statistics show that except for Malawi (2 cents/Kwacha) Zambia has one of the lowest tariffs in the region at 3.4 cent

Kwh, compared with Zimbabwe (4.3 cents/kwacha), South Africa (4.7 cents/Kwacha), Mauritius (12.4cents/Kwacha), Botswana (5.5 cents/Kwacha and Kenya (9.2 cents/Kwacha).¹¹

The country however can benefit in terms of reduction of the cost of electricity through efficient generation, reduction in the excise tax and the huge potential to generate electricity, second only to Congo DR in this region.

The privatization of road grading or construction is not consistent with production needs or potential. The situation has resulted in high transport costs, resulting in reduced opportunities in input supply, vehicle maintenance costs, and limited access to production areas for gemstone miners.

Regional and International Competition

There are numerous constraints to Zambia's export growth. Some of these are external, such as practices by some of Zambia's trading partners that impede the growth of Zambia's exports. Remedies for such practices can and should be pursued under the rule-based system that the World Trade Organization (WTO) makes possible. Similarly, the conflict between the Common Market East and Southern Africa (COMESA) and Southern Africa Development Community (SADC) should be resolved in the light of the fact that the two regional bodies are both working at the establishment of Free Trade Areas (FTAs). Nevertheless, the low level of Zambian exports owes much more to conditions inside Zambia than to practices of other countries. The major internal constraints in this section include those already discussed in the earlier sections above. Others are:

- Duties on raw materials. Duties on some raw materials attract a 5 percent rate, whilst a 15 percent rate is applicable on intermediate goods. Finished goods attract a rate of 25 percent. These all add to the cost of production, making the private sector industries less competitive.

Due to traditional ties with the West and South Africa, most Zambian firms have continued to procure their inputs from outside COMESA and thus subject themselves to import duties which they would not otherwise pay if they imported from COMESA. Further more, some of the raw materials and critical inputs -- such as concentrates -- are not available in COMESA. Priority should be given to utilization of local raw materials but there are limitations in this area. Zambian firms will continue for quite some time to rely on imported raw materials.

- Centralized export procedures and poor quality of exports. Sectors that require permits for their goods to be exported have consistently had a problem with the centralization of export procedures. The gemstones sub-sector, agricultural sector, leather sub-sector and the animal products sub-sector are particularly affected.

¹¹ Export Board of Zambia, 2001

Gemstones have to be valued in Lusaka and a letter of authority issued from the capital for the goods to be transported out of the country. This means that firms have to incur transport and lodging costs in Lusaka and a few selected districts. Travel and lodging costs are therefore incurred by firms, which are not located in such particular districts.

- Dumping. Dumping refers to the practice of pricing goods at a lower price than their value in the country of origin. With the implementation of the COMESA Free Trade Area, some companies have complained that COMESA member states are taking advantage of the liberal policies Zambia is pursuing and are dumping goods the country. Reports of such practices have been made to Government and sometimes directly to COMESA. However, it has been difficult to prove these allegations. The option is therefore to enforce safeguard legislation where proof is not a requirement.
- Payments System. The payments system in Zambia is poor due to the absence of viable export credit facilities as well as export pre-financing revolving funds. The absence of strong export insurance facilities was seen by the participants to be another problem among Zambian exporters.
- Lack of political support for exporting and poor public dialogue. The export sector has not received priority consistent with its critical role in Zambian growth. The Ministry of Commerce, Trade and Industry and its dependencies have been severely under-funded.

Communication between the private and public sector is poor, reflecting suspicions and lack of understanding on both sides. Government responses to policy queries are usually slow. There is lack of transparency to enable producers and exporters know why the Government was not responding to a number of calls. This has implications for the country's preparedness for the FTA. Private sector associations frequently make unreasonable or self-serving demands for Government action. The Government has sometimes treated dialogue with the private sector as an afterthought, undertaken after critical decisions have been made.

3.2 Current GRZ, USAID and Other Donor Efforts

Government and donors have attempted to induce growth and development of the economy in many ways. The following are some of the major efforts achieved by Government and donors.

3.2.1 GRZ Efforts

The efforts of GRZ in the economy, specifically the private subsector should be seen as that of facilitation or creation of an enabling environment. This includes enacting laws and regulations that encourage the growth of the private sector. We highlight in the

following paragraphs what efforts the GRZ has expended to play this role both inward and outward to the region and the international markets.

Privatization

Zambia's privatization program has been one of the most dynamic in the region. Privatization of the mines and other parastatal companies in Zambia has led to significant investments. The Lusaka Stock Exchange (LUSE) has benefited from privatization and liberalization of the economy. A number of privatized companies such as Chilanga Plc, Zambia Sugar Plc and Zambia Breweries Plc are quoted on the LUSE. Further, because of liberalization, some traditional commercial banks such as Standard Chartered Bank Plc and Farmers House Plc have their shares placed at LUSE.

Poverty Reduction Strategy Paper (PRSP)

Zambia has recently launched the PRSP as an effort to reduce poverty in the country. PRSP will form an integral part of the five-year National Plan that Government will launch in 2003. The International Monetary Fund, World Bank and donors have approved PRSP. The private sector has featured prominently in PRSP and it is expected that it will be factored in the Five-Year National Plan. Although the PRSP has yet to be implemented, the effort is an indication of the Government's desire to redress the imbalances in the economy.

Transport Sector Policy Reforms

Zambia has been in the forefront of transport sector policy reforms in Africa including the introduction of a fuel levy providing the basis for road maintenance. The main policy objectives, stated in the 1995 Transport White Paper, were to increase private sector involvement in the construction and maintenance of infrastructure, to ensure appropriate financing and to secure adequate allocation of resources between transport modes.

This policy reform led the GRZ to quit road passenger transport leaving it to the private sector, liquidating the state airline Zambia Airways and inviting the private sector to invest in the airline industry. To finance the road infrastructure GRZ mooted the Road Sector Investor Program 1 (ROADSIP1) in 1997 to run for 10 years. Donors were invited to participate into this program. Some of the donors who participate include the World Bank, African Development Bank, Japan, and NORAD, DENMARK. Road users also participate through the Fuel Levy, which is collected at source (imputed in the cost of fuel at the pump station) and goes towards road maintenance.

As ROADSIP 1 has almost come to an end, the GRZ has embarked on ROADSIPII to build upon ROADSIP 1's foundation. Currently the GRZ has completed a bankable document for ROADSIPII and is inviting Expressions of Interest (EOI) for consultancy services to evaluate the financial strategy.

Recently Zambia Railways has been overhauled in preparation for private sector concessioning. Modalities to concession the Tanzania Zambia Railway (TAZARA) are in the early stages.

Private Sector Participation in the Water Sector

Since the early 1990's, Government has been reforming the water sector starting with the enactment of the Water and Sanitation Act and the progressive evolution of the Water Reform Support Unit into the formation of the National Water and Sanitation Council (NWASCO) that is a regulator for all commercial water utilities being set up in the country. The objectives of these water utilities are to have private sector participation in the provision of water.

International Trade Relations

Whereas the GRZ has achieved notably in restructuring the national economy, it has also addressed the importance of its membership to regional and international organizations as these organizations impact on the national economy. For example Zambia is a founder member of SADC and is currently responsible for the SADC mining sector. It was one of the ten signatories of the treaty establishing in 1981 what is now COMESA.

As is well known, the importance of these organizations is to facilitate trade among member states. COMESA has achieved the FTA for its members. The SADC Trade protocol, once a member signs it, has the objective of obtaining better access for its export products. The other trade organization to which Zambia adheres is the South African Customs Union (SACU) for selected goods to South Africa.

On the international scene outside Africa, especially with the European Union (EU), Zambia operates within the framework of the Cotonou Agreement and recently with the USA, through AGOA. The objective of the respective initiatives is to access the European and American markets with Zambian goods.

As a result of its increased regional and international economic orientation, Zambia has laid a foundation to integrate with its neighboring countries and global markets, which will provide improved conditions for trade expansion at the regional and international levels. The GRZ deserves credit for these efforts.

3.2.2 USAID Efforts

USAID supports a number of private sector-oriented activities. The activities of each of these and the type of support given by USAID are briefly described in the paragraphs below.

Zambia Trade and Investment Enhancement Project (ZAMTIE)

ZAMTIE began operating in the early part of 2001. It takes a "demand-driven" approach to policy analysis on topics primarily affecting agriculture, agribusiness, and tourism. ZAMTIE has three objectives. These are:

- To reduce barriers to trade and investment.
- To build capacity of public and private sector organizations to facilitate economic growth and reduce poverty.

- To foster linkages to optimize rural income – generating investment and trade opportunities between and among producers, suppliers, processors, traders, service providers, and consumers within and outside Zambia.

In this regard, ZAMTIE has supported many projects in Zambia. Demand for ZAMTIE support from both the private and public sectors continues to grow. It supported MCTI in preparing a trade sector submission to the Ministry of Finance and National Planning for the Interim National Development Plan; provided analysis of a bilateral trade agreement presented by Mozambique with recommendations to the Zambian Government; completed and distributed the Zambia E-Commerce Assessment¹², which received major attention from the national media; conducted AGOA promotion workshops in Lusaka, Kabwe and Ndola followed by the publication of the workshop proceedings¹³ and the results of Zambia Export Products Research Study to Assess US AGOA Import Regulatory Requirements¹⁴; assisted the Business Forum by preparing a Proposed Study for Review and Harmonization of the Tax Structure, Policy and Administration in Zambia to enhance Investment and Economic Growth¹⁵.

In the area of trade and investment, ZAMTIE has assisted small-scale gemstone mining and processing businesses to form a federation, which will become a member of the Chamber of Mines. This will provide a base for representational activities for the sector as well as for establishing infrastructure such as a gem exchange. It will broaden the representational base of the Chamber of Mines, thus strengthening the Chamber's leverage. ZAMTIE has in this regard assisted in the drafting of the constitution for the gemstone federation. Currently the small-scale gemstone-mining sector is fragmented, and its associations operate on a regional rather than national basis.

The targets for ZAMTIE's capacity building activities are ministries concerned with trade and investment, trade and investment service centers, business chambers and associations and private companies involved in Trade and Investment. Examples include the workshop on General Agreement on Trade and Tariffs (GATT)/WTO framework for Global Trade organized for Government organizations concerned with the implementation of the Government's commitments under GATT/WTO¹⁶, and a workshop on Foreign Direct Investment for Government agencies concerned with promoting investment.

ZAMTIE assisted in drafting documentation and facilitating approval for the AGOA visa system, which provides required source of origin information for textile and apparels. This could open large markets for Zambian cotton, yarn, textiles, and apparels. As these

¹² Cliff Barton, Zambia E-Commerce Assessment, March 2002

¹³ Trevor Simumba and Bwalya Penza, Editors, US market Opportunities and AGOA Workshop Report, April 2002

¹⁴ Michael Blakeley, Zambia Export Products Research Study to Assess US AGOA

¹⁵ ZAMTIE, Proposed Study for Review and Harmonization of the Tax Structure, Import Regulatory Requirements, May 2002

Policy and Administration in Zambia to Enhance Investment and Economic Growth, May 2002

¹⁶ A report on the subject was published by James L. Kenworthy, Introduction to the GATT/WTO Framework for Global Trade, March 2002

sectors have excess capacity, greater production should result in less costly and thus more competitive products. Further, ZAMTIE assisted in the establishment of the Business Forum of the leading chief executing officers of the country's five major business associations, namely, the Zambia Association of Chambers of Commerce and Industry (ZACCI), the Zambia National Farmers Union (ZNFU), the Tourism Council of Zambia (TCZ), the Chamber of Mines and the Zambia Association of Manufacturers (ZAM) which should allow common positions to be reached and conveyed to relevant Government officials creating a virtuous circle.

ZAMTIE also participated in the preparation of the PRSP zero-draft for the tourism chapter. ZAMTIE prepared a policy note for the Strategy Team Leader on the importance of economic growth for poverty reduction and a trade and investment issue paper, which was presented to the Strategy Team as it was concluding its zero drafts. ZAMTIE further, provided comments on the zero drafts for the agriculture tourism and industry chapters, a number of which were included in the first draft, and additional suggestions were provided.

In the area of fostering linkages, ZAMTIE's goal is to stimulate income-generating investment and trade opportunities between and among producers, suppliers, processors, traders, service providers, and consumers within and outside Zambia. For instance, ZAMTIE assisted ZACCI with the development of a directory of Zambian businesses, which targets and links ZACCI with Zambian and foreign businesses. As requested by the Export Board of Zambia for business people interested in the US market, ZAMTIE has done a study of the US market for potential Zambia exports.

ZAMTIE staff have confidence that the demand for its service will continue to grow. However, there is no clear defined path for sustainability of the project at this time. ZAMTIE will work closely with and provide organizational capacity building to several private sector organizations, including the Zambia Chambers of Small and Medium Business Associations, but it is not clear that any of these will be able to take over a "think tank role" at the project's end.

The International Executive Service Corps (IESC)

IESC started operating in Zambia in 1989. It is also demand driven. IESC provides technical and managerial assistance for small-and medium sized enterprises, non-governmental organizations and trade associates and business support organizations. In 1989 IESC provided TA to set up the Zambia Privatisation Agency (ZPA). During the same year, it provided technical managerial assistance to between 25 to 30 privatized companies in order to improve their competitiveness. These included Kapiri Glass, National Drum and Cane, Supa Baking, Marble, General Pharmaceuticals, Savoy Hotel, Mukuba Hotel, Agriflora, Enviro, Enviro-oil, Cold Storage Corporation, Restaurants and many others. IESC observed that those companies that succeeded had accepted its technical and managerial advice. Some companies failed to implement the technical assistance given them mainly because they lacked capacity.

IESC has also given technical assistance to ZAM, ZACCI, ZNFU and the Tourism Council of Zambia. It coordinates with District Business Associations (DBAs), the Zambia Agribusiness Technical Assistance Centre), ZAMTIE (on policy matters), DFID, World Bank, GTZ, HIV/AIDS Program (to SMEs) and the EU's Private Sector Development Program (PSDP).

IESC has provided very successful accountancy training for DBAs in Livingstone. It would wish to extend this training to the Copperbelt Province.

IESC focuses on SMEs and believes that for the security of Zambia the emphasis should be on development of SMEs for the purpose of creating income and employment. When this sector has been developed, the majority of the people will be able to pay tax (for further development) thus contributing to further economic growth.

Center for Institutional Reform and the Informal Sector (IRIS)

Some of the major studies undertaken by IRIS since 1999 are as follows:

- Assessment of the Private Sector. IRIS undertook a complete review of the Zambian private sector environment to determine its strengths and weaknesses, including a review of the circumstances, the rules of the game and the main players. The purpose of this study was to identify mechanisms that USAID might use to encourage sustainable private sector growth. IRIS' work included a review of the macroeconomic performance and issues, privatization, the legal framework, business organizations, donor activities in the area, critical issues/limiting factors, role of micro-enterprise, and potential areas of assistance for donors. The report identified four areas of assistance to enhance private sector growth: privatization, commercial courts and legal reform, trade policies and practice, and small business association services.
- Establishment of Training Systems and Development of Planning and Monitoring Systems for Credit Management Services. An IRIS team was contracted by USAID with the objective of building the capacity for effective, self-financed, ongoing organizational and human resource development in Credit Management Services (CMS), a privately owned microfinance company. The team completed a training needs assessment for CMS staff, identified training needs for CMS clients and potential clients, suggested sources for the required training, and provided direct tutoring services for planning and budgeting activities with senior and mid-level staff.
- Microfinance Legal Review and Framework Design. An IRIS team introduced a legal and regulatory structure for microfinance institutions (MFIs) in Zambia. Research findings indicated that Zambia would benefit from a new legal structure that recognized the unique nature of this sector and enabled its integration into the larger financial market by providing a tiered structure of operations and performance. In this way, the legislation and developing regulations provide realistic support and growth options for microfinance institutions, rather than

being burdensome or contradictory. Three important issues considered in the development of this approach were the nature of ownership and accountability in microfinance institutions, the assignment of the regulatory role to a specific body, and the realization that failure of an MFI, while not impacting the entire financial market, could cause serious repercussions in the sector. IRIS produced draft legislation. The resulting "Amendment to the Government of Zambia Act 18, Banking and Financial Services Act" was passed by the Zambian Parliament on August 25th, 2000.

According to IRIS, the first round of commercial reform in Zambia has gone well. In the process many accountants and lawyers received training. As a result, the country has sufficient capacity to draft additional legal changes. IRIS has noted that the basis for commercial law in Zambia remains the 1876 Sales and Exchange Act, and this is archaic

The Zambia Chamber of Small and Medium Business Associations (ZCSMBAs)

ZCSMBA receives funding from USAID in the form of a grant. The grant helps to cover the cost of the secretariat, which in addition to the Executive Secretary includes a staff of five professionals. ZCSMBA also receives support from the EU'S PSDP through Friedrich Ebert Stiftung (Germany) which provides annual funding for specific activities.

In addition, ZCSMBA has agreements with two MFIs, namely, CMS and the Ecumenical Church Loan Fund (ECLF). Only 9 of its 53 member DBAs have been able to access loans. ZCSMBA has problems communicating with its membership. It is important that members are connected to faxes and Internet, which are cheaper, and faster methods of communications. However, ZCSMBA does undertake workshops in which its membership is taught how to run a business and record keeping. These workshops are demand driven, heavily subsidized, but done on a cost-sharing basis and include follow – up 4 to 5 months after the initial training. The organization could benefit from a training needs assessment.

Credit Management Service (CMS)

Credit Management Services Limited (CMS) was founded in Kabwe in 1992. CMS is a wholly Zambian owned private company and is registered with the Bank of Zambia as a non-deposit taking Financial Institution under the Banking and Financial Services Act of 1994. As such CMS is supervised and inspected by the Bank of Zambia. CMS is a founder member of the Association of Micro Finance Institutions of Zambia (AMIZ). Its objectives revolve around promotion of savings and access to credit by the poor:

CMS' major sources of funding are the Micro Bankers Trust (MBT) and USAID. The Micro Bankers Trust is an apex institution that lends money to member organizations on a commercial basis, for on lending to the poor. CMS is a borrower from this fund. The purpose of this fund is an initiative towards the global poverty alleviation campaign. With this financing, CMS has extended ZMK 714 million in loans to 933 clients using solidarity group lending approach in the Southern, Central and Lusaka Provinces and the Ndola District in Copperbelt Province.

CMS uses its USAID funding for solidarity group lending predominantly to rural women. The objective of this funding is “increased incomes for selected rural groups”. The fund has made a difference to the livelihoods of clients’ families and members. To date it has extended credits of KMW 1.8 billion to 3,100 clients in rural areas of South, Central and Lusaka Provinces and Ndola Rural District of Copperbelt Province.

CMS also has worked with a USAID partner, the Cooperative League of the USA (CLUSA), in the same regions as well as in Chipata in the Eastern Province. CMS provides both micro finance and accounting consultancy services to the CLUSA Chipata programme, which includes setting up a producer owned trading company, which will take over CLUSA’s role when the project comes to an end.

In addition CMS has its own portfolio where it serves mainly small to medium entrepreneurs who also are not able to obtain credit from the commercial banks. To date it has disbursed ZMK 800 million and has a current portfolio of 300 loans.

Loans are made to individuals within groups using the solidarity group methodology and also a small number of loans to individuals on their own. Group members have to guarantee each other’s loans. Women account for 90 percent of the loans granted under this program, and 95 percent of loans granted are in rural areas. CMS requires all borrowers to have savings equivalent to 25 percent of the requested loan before it will begin processing an application.

CMS’ target groups include: farmers (not for rain fed crops), furniture manufacturers, shoe manufacturers, tailors, poultry rearing and egg production, women (individuals & groups), small business persons/entrepreneurs, livestock traders, and general traders. Its customers are micro- and small-scale operators who have limited or no access to credit services offered by the established financial institutions. They are often members of lower income groups in peri-urban and rural centres, and illiterate or semi-literate. Currently 90 percent of the clients CMS serves live in rural areas.

3.2.3 Other Donors

Embassy of Sweden

Microfinance is an important part of the Swedish portfolio. It supports the work of IRIS in dealing on regulation at the Bank of Zambia (BOZ). It is working with the AMIZ, and it provides capital on a loan basis as well as funds for operational support. This program has a loan repayment rate, “in most areas” of 97-98 percent, and its client base ranges from women selling tomatoes to cross-border traders. This clientele ranges from slightly below the poverty line to middle class. It takes a group lending approach and does not lend to individuals. Group range in size from 5 to 10, the interest charged reflects the costs of lending, including inflation and operation costs. Although the rate may be high, the client base appears to be more concerned about access to capital than the cost of capital. Another feature is Pride’s insurance fund” which requires payments of approximately 20 percent of the loan outstanding per week - a more or less disguised forced savings plan to get around the fact that BOZ regulations can be issued through a Statutory Instrument.

IRIS received funding from the Swedish International Development Agency (SIDA) to prepare and submit a report after analyzing the Business Plan for the Promotion of Rural Initiatives and Development Enterprises (PRIDE) Zambia. The report analyzes PRIDE's operations in the context of other microfinance institutions operating in Zambia. PRIDE Zambia provides micro and small-scale entrepreneurs access to credit services, generates business growth and increase employment, develops new financial products targeted at the micro-enterprise sector and reduces the cost of serving the micro-enterprise sector through development and use of new technology.

Mainstreaming HIV/AIDS will be a part of the new private sector strategy. The Swedish Embassy will be working with the International Labor Organization (ILO) on Business Development Services, targeted at SMEs, and especially those in the media and involved with the Internet.

World Bank

The World Bank supports the following private sector development initiatives in Zambia

- **Private Sector Efficiency and Competitiveness:** The World Bank will continue to support regulatory reform and privatization program including state-owned utilities and financial institutions. It will continue to address critical ZCCM privatization transaction issues i.e. in respect to final transfer of ZCCM assets.

In addition, the World Bank has provided support to private sector growth and competitiveness through technical assistance (TA) and increased investment through its various agencies, including the International Development Association (IDA), the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA). This assistance is to assist the local firms adapt to the newly competitive environment. IFC's strategy in Zambia focuses on a range of sectors with particular preference for foreign currency generation projects i.e. infrastructure, financial sector, mining, small and medium-sized enterprises, agribusiness and tourism. Bata Shoes, Finance, Zamcell (now Celtel) and Amaka Cotton are some of the private companies that have been supported by IFC. MIGA's efforts in Zambia are designed to contribute to strengthening the private sector through the provision of selective support for projects with high developmental impact. MIGA has also provided advisory services and TA in Zambia to strengthen investment intermediaries charged with attracting foreign direct investment. In 1999 MIGA issued a US\$1.8 million guarantee in its first project in Zambia to cover an investment in the manufacturing sector. In addition, it has 14 applications pending for more than US\$500 million in investments in the mining, manufacturing and power sectors. Past TA has included capacity building, (e.g. FDI promotion) mining investment, facilitation, regional investment facilitation, and information dissemination (e.g. privatization)

- **Infrastructure:** The World Bank continues to support development of infrastructure, including the Zambia Railways restructuring.

- Transport. This has involved the private sector concessioning of Zambia Railways; rehabilitation of about 1,400 Km of roads and increased share of maintenance expenditure in Road Fund from 65 percent (1998) to 95 percent by (2002), increased Road Fund coverage of maintenance requirements from 33 percent (1998) to 70 percent by (2002); increase proportion of paved roads in good condition from 20 percent (1998) to 45 percent by 2002.
- Energy and Telecommunications: World Bank supports financial viability and eventual privatization of ZESCO and private sector participation in ZAMTEL.

The World Bank is also involved in the economic diversification program, with the following currently slated to be included in its plan of action.

- Gemstones: The first tranche of funding would provide for studies (market research and supply side surveys), which would lead to development of a comprehensive strategy. The market research studies will include a review of traditional and new markets, channels of distribution, buyers' behavior, existing and potential competitors, market entry barriers, and market development strategies. The supply side surveys will include information on investors; Government and donor plans; gemstone reserves; mining, processing, trading activities; legislation and regulations; ministries and institutions; and infrastructure.
- Small and Medium Enterprises: The Bank foresees establishment of a risk capital investment fund for SMEs in Zambia. The "Fund" will provide financing, in the form of both debt and equity, to approximately 25-30 SMEs over five years. The Fund will not be constrained to investments in specific sectors, but may place preference on the sectors with the highest potential for economic diversification (tourism, agro-processing, etc).

European Union

European Union assistance programs are based on the Cotonou Agreement for the years 2001 – 2002. The EU is focusing on selected sectors namely: transport, and institutional development and capacity building, combined with macro-economic support.

The EU has supported the transport sector, mainly through the rehabilitation of trunk-and feeder roads and the rehabilitation of Mpulungu Harbour in preparation for its privatization. The EU has further strengthened the capacity of the budget and national accounts departments as well as the National Authorization Office (NAO) through individual TA contracts. An evaluation of this assistance has shown that the support given has not been sustainable at individual level. However the long-term training program at the Bank of Zambia has been found to be sustainable.

The EU also provides support to the following financial activities:

- Trade and Enterprise Support Facility (TESF). TESF is an integral part of the PSDP supported by the EU in collaboration with the Government on going efforts of reforming the economy. The facility is specifically aimed at assisting the private sector.

TESF supports four sub-activities as follows:

- Feasibility and Market Studies.
- Business re-engineering and Corporate Recovery.
- Guarantor to Banks that provide working capital finance to entrepreneurs who do not have sufficient collateral.
- Preparatory activities for companies seeking to list on the LUSE.

Under the above activity TESF will meet up to 70 percent of the cost of engaging a professional consultant in preparing “bankable” documents for submission to financial institutions in support of applications for term finance. This is a revolving interest free loan facility and businesses are expected to refund this 70% component within 30 days of receiving funding from the financial institution.

The NAO in the Ministry of Finance and National Planning is the designated Government contracting Authority for TESF. Grant Thornton Associates Limited (GTA) took over the management of TESF from the previous managers, Zambia Capital Partners. The role of GTA is to provide administrative support to a steering committee, which reviews and approves applications for allocation of TESF funds. A further objective of Grant Thornton in the management of TESF is to minimize wastage of the funds by screening and only recommending proposals that it considers stand a reasonable chance of securing project funding once a “bankable” document in support of the project has been produced.

- Financial Support to Small and Medium Scale Enterprises (Window 2, FSSMSE). GTA is the apex financing institution that administers the revolving funds under this facility. The funds are lent through a few participating financial intermediaries, which are selected by tender. Eligible Enterprises are those that carry out activities in manufacturing, agro – processing and tourism. Macro, small and medium scale enterprises are defined as follows:

Type	Turnover(Millions of Kwacha)	Employment (Staff)
Micro	Below 50	Less than 9
Small	50 to 500	10 to 99
Medium	501 to 10 000	100 to 500

An initial revolving fund of US\$2.0 million has been made available with a likelihood of being increased to US\$ 4.0 million, depending on the performance.

Loans are in made in Zambian kwacha to avoid the currency risk associated with devaluation. Loan amount per enterprise is ZMK300 million maximum for

investment purposes and ZMK150 million for working capital purposes per enterprise.

The loans are for medium and long-term of between three-to-five years for purchase of equipment and machinery. Short-term loans of between one-to-two years are given for working capital

Currently, commercial bank rates are between 35 percent and 40 percent. A simple interest of 8 percent rate is charged and not compounded.

FSSMSE assistance is spread in Copperbelt, Northern and Southern Provinces

Security for lending consists of one or a combination of the following:

- First mortgage on developed real estate.
- Specific charge over the borrower's fixed assets.
- Floating charge over the borrower's current assets.
- Pari – passu charge with other secured lenders.

Japan International Cooperation Agency (JICA)

JICA is an implementing agency of Japan's Technical Cooperation Programs with foreign countries. It carries out a variety of programs to support national development of the developing countries through technical cooperation arising from official requests of the recipient countries.

In Zambia JICA has undertaken a number of projects. Its grant aid programme has financed:

- Kafue Road Bridge Construction Project.
- 9 Grain Storage Sheds Construction Project.
- Project for the New Agriculture Village Development in Kanakantapa – on going activities.
- Rural Road Rehabilitation Project.
- The Project for the Rehabilitation of Telephone Cable Network in Lusaka (Ridgeway and Lusaka Main Exchange areas).

Through its development studies program, JICA has also financed research on mineral exploration in Kabwe West and Chambeshi, as well as a study on long term plan for development of the telecommunications network 2015.

Currently JICA is involved with the Airport and Chirundu roads. When these are completed they will construct the Independence Avenue, Church Road and Manchinci road in Lusaka;

JICA is not involved in minerals or agro-processing or micro-financing. The latter is done indirectly through the Association for Medical Doctors (AMDA), an NGO in Japan.

AMDA provides Micro-Financing to Chainda residence- mainly for income generating activities such as trading.

DFID

DFID supported the Zambia Privatisation Agency (ZPA) on the privatisation of the Zambia National Commercial Bank and with the finalization of mines privatisation. It provided a guarantee of 5 million pounds (approximately US Dollars Eight Million) for the mines smelter.

DFID has been supporting in the following financing schemes:

- Peri Urban Lusaka Small Enterprise (PULSE) Project. PULSE has been operating as a micro-credit program in Lusaka since 1995. CARE has been managing PULSE under a grant agreement with DFID since July 1996. The goal of the project is to increase household income, economic security, and employment opportunities amongst the families of poor micro-enterprise owners in peri-urban areas of Zambia. The purpose was to establish PULSE as a sustainable micro- finance institution.

Since inception, PULSE has disbursed loans to 10,234 micro-entrepreneurs amounting to ZMK4.8 billion and has a current active portfolio of ZMK920 million, with an active list of 2,880¹⁷ clients, at the end of April 2001. PULSE managed to cover 61% of its expenses through its income, half of which comes from investment income.

In 2001, PULSE was registered as an independent Zambian company (PULSE Holdings Limited). A new loan product has been successfully introduced, portfolio quality has significantly improved, and internal structures and systems have been rationalized in order to support higher out-reach targets efficiently

- Christian Enterprise Trust of Zambia (CETZAM). CETZAM is an independent NGO headquartered in Kitwe, Zambia. It was formed in 1995 with the aim of “transforming the lives of the poor by providing opportunities to create employment and generate income through micro enterprise credit and training services”. Since 1995, the Zambian board of directors has guided CETZAM. CETZAM approached Opportunity International in late 1995 for technical assistance and guidance in launching an effective and viable program capable of impacting on CETZAM’s target population.

UNDP

UNDP was previously involved in private sector support. It does no longer support this sector.

¹⁷ DFID Report, April, 2001

3.3 Lessons Learned

Reviewing the current state of the private sector and the results of past and on-going Government and donor efforts to support private sector development, the assessment team draws the following lessons learned. Government efforts since 1991 have prepared a foundation for the future. The economy has been liberalized. Import and export controls have been eliminated, and competition is encouraged. The donors have come in fully to support economic growth. The lessons learned that follow are grouped by those that evolve from Government interventions and those from donor interventions.

3.3.1 Government Interventions

Interest Rates

Interest rates (which reflects cost of capital) on borrowings remain prohibitive in Zambia. Currently the interest rates range from 45% pa (from commercial banks) to 96% pa (from CMS). By any standards, these are high figures and it could be deduced that these have an adverse impact on the growth of the private sector. The lesson, though, that we could draw is that in spite of these high rates, borrowers still borrow at these rates, indicating that they are more concerned about access to capital than the cost of it. This could mean either that there is scarcity of capital in Zambia or a distortion in market information about supply and demand on this commodity. As indicated elsewhere in this report, SMEs borrow from MFIs at high interest rates.

Dumping

The major trade associations in Zambia, especially the Manufacturers Association of Zambia, have indicated that although the COMESA Free Trade Area concept is aimed at boosting regional trade, it is currently adversely impacting on Zambian industry because the trade playing field is not level for local and foreign goods. COMESA member states are taking advantage of the liberal policies being pursued by Zambia and are dumping goods in Zambia. Reports of such practices have been made to Government and sometimes directly to COMESA. However, it has been difficult to prove these allegations. Selected products such as cement and some agricultural and manufactured goods from Zimbabwe and South Africa are comparatively cheaper than identical Zambian goods. The argument has been that these goods are subsidized in their country of origin while the Zambian Government is not extending the same to its own companies.

Financial Services

The financial services sector in Zambia is quite extensive but uncoordinated. The amendments in 2000 to the Banking and Financial Services Act of 1996 strengthened the ability of the central bank to respond promptly and comprehensively to any adverse developments in the financial sector. But this has not answered the plight of the SMEs nor has it remedied the financial situation of the commercial banks in the country. Thus, a major state-led project with the support of the donors is needed to transform the financial architecture of Zambia in ways that will make the financial sector more supportive of development oriented growth.

Licensing and Taxation

An attempt has been made by Government to institute legal reforms such as commercial reforms especially in the area of taxation and licensing. These regulations are archaic. The basis of commercial law in Zambia remains the 1876 Sales and Exchange Act¹⁸. The Taxation Act has remained basically static. Changes in taxation in the budget each year are cosmetic because the fundamental aspects of the law have not changed. Similarly, licensing procedures have remained bureaucratic and costly. While IRIS has assisted in the development of a regulatory framework for MFIs at BOZ, the areas of taxation and licensing (at the Zambia Investment Centre) require changes to bring about a legal framework that is environmentally friendly.

3.3.2 Donor Interventions

Interventions by donors have produced a mixture of lessons. A brief is given below.

Financial Programs

The CMS experience suggests that access to capital may be a more important concern than the nominal cost of capital. There is a segment of the market that can sustain the high cost of capital and operate profitably. In this light, programs providing subsidized credit may be misguided. It may serve the longer-term development interests of the country to promote activities that seek out and support business ventures that project very high rates of return.

Technical Assistance and Capacity Building

A review of the EU, ZAMTIE, IESC, ZCSMBA and IRIS programs reveal that whereas some positive contributions have been made to the country, the critical issue of sustainability of these interventions still remains unresolved. At EU and ZAMTIE, will the successes continue when the current programs come to an end and the technical assistance teams have departed? ZCSMBA is currently facing communication problems with its members at the grass roots level where economic activities are supposed to be buzzing; do these problems indicate a lack of funding or capacity? IRIS claims that it has built capacity among lawyers and accountants to draft meaningful legislation for Government. Could that be substantiated on the ground?

Production and Marketing Methods for Gemstones

The gemstone industry lacks production and marketing policy. The marketing methods of the gemstones have been unsatisfactory and intermediaries have taken advantage of the marketing situation, thereby obtaining gemstones directly from the workers at the expense of the mine owners. Even in cases where the intermediaries get the gemstones from the mine owners themselves, there is lack of skills in valuation of the products and this greatly disadvantages the producer who has no other immediate market for the product except the intermediaries. This affects the returns as well as the capacity to reinvest in the sub-sector. A lot of tax revenue is lost in illicit trafficking of gemstones. As was said, earlier, Government has indicated that it will reintroduce the Gemstone Exchange scheme to serve as a forum for the producers and the buyers of rough and

¹⁸ Ibid.

processed gemstones and jewelry to conduct auctions and routine transactions. The re-introduction of the Gemstone Exchange Scheme will serve as a forum for the producers and the buyers of rough and processed gemstones and jewelry to conduct auctions and routine transactions. The gemstone exchange will also encourage the participation of traceable gemstone trading and marketing companies rather than individuals, in order to promote transparency and accountability. This will revitalize the sector and increase the incomes of the communities around the mining operations. But in order to achieve better production and marketing methods of the industry, it is critical that a new policy and legal framework is undertaken. ZAMTIE has the capacity to do this job since they are specialist in policy and capacity building.

3.4 Moving Forward: Opportunities and Constraints

This chapter concludes with the recommendation that future private sector support efforts focus on the processed foods and textile industries, gemstones, and rural electrification.

3.4.1 Processed Foods

As noted earlier, exports of processed foods in 2001 were the second largest after primary agriculture. This sub-sector is expected to expand as the agriculture sector is given the priority to take over from the declining large mines. In 2001, total exports of processed foods sub-sector increased to US\$43 million from US\$35 million in 2000, that is, an increase of 23 percent. This sector includes sugar, mealie-meal, stock-feeds and flour, honey and bee wax, cooking oil and carbonated soft drinks constitute the other products. Tomato pastes, jams, peanut butter, and dried fruits and vegetables are also in this sector although exports of these products are minimal.

However, due to inadequate maize stocks in Zambia, exports of mealie-meal and stock feeds, which are products of the milling process, are currently banned. But the ban is likely to be lifted once stocks of maize have increased.

3.4.2 Textile and Apparel

The Government should take a leading role in ensuring that all textile and garment exporters meet visa requirements to access the US market through AGOA. The Government should also lobby for an increased quota from the current 1,700 tonnes to export to South Africa under the SADC trade protocol. ZRA should abide by the provisions of the law and ensure that textile and garment exporters get refunds on duty within the stipulated time frame.

3.4.3 Gemstones

The current GRZ program to diversify the economy away from copper has the donor support. The areas of diversification include agriculture, agro-processing, tourism and gemstone mining as well as private sector reforms. Although small-scale mining has no great impact currently on the growth of the economy currently as compared to agriculture

and tourism, it has the potential to grow in the future. Diversification in agriculture and tourism will certainly take over from the declining large and developed mining sector, but agro-processing and small-scale mining are expected also to pick up from the decline in larger mines. Over the years large mines have crowded out the small and emerging mines. The focus of the diversification program is to identify the potential in small-scale mining. In this context, research studies will be essential to develop a comprehensive strategy on small-scale mining.

This will entail developing adequate geographical data and efficient methods of production, undertaking market research studies on traditional and new markets, channels of distribution, buyers' behavior, existing and potential competitors, market entry barriers, and market development strategies. Further survey should include information on investors; GRZ and donor plans; gemstone reserves; mining, processing, trading activities; legislation and regulations and infrastructure.

3.4.4 Rural Electrification

Studies that have been done by ZAMTIE to review farmers' electricity tariff and other requirement for rural electrification are critical to the development of the rural sector and the growth of the private sector. Export of electric power to the Southern Africa region, e.g. Congo DR, Zimbabwe, Malawi, Angola, Namibia and others, can be enhanced if production is increased. This may require support for financial viability and privatisation of ZESCO. Indications are that ZPA has targeted ZESCO for privatisation although there is no political commitment yet to do so.

CHAPTER 4: AGRICULTURE SECTOR

4.1 Sector Overview

Zambia has abundant land and water resources that can be used for agricultural production. Out of about 750,000 square kilometres of land surface, 42 million hectares are classified as arable. Currently only about 14 per cent of the arable land is cultivated. There is also abundant underground and surface water, including rivers, lakes and dams that can be used to irrigate about 500,000 hectares. Out of this irrigable land, only 65,000 hectares are currently irrigated (Ministry of Agriculture and Cooperatives (MAC), 2001).

4.1.1 Agro-ecological Zones

Zambia is divided into three agro-ecological zones, based mainly on rainfall. Zone I is a low rainfall area. 350-800mm/annum and covers Southern Province, parts of Western, Lusaka and Central Provinces. Zone II is a medium rainfall area with annual rainfall varying between 800mm and 1000mm. This Zone covers Central and Eastern Provinces and part of Western province. Zone III is the high rainfall area with annual rainfall of more than 1000mm. It covers Copperbelt, Northern, Luapula and North-Western Provinces. The differences in rainfall, mean temperatures, vegetation, soils and duration of the rainy season in the three zones make it possible for Zambia to grow a wide range of crops. It also broadens comparative advantages for various crops.

4.1.2 Land Tenure

Table 4.1 Estimated Allocation of Total Land (Millions of hectares)

Province	Open Water	National Park	Game Management	State Land	Traditional Land area	Total Area
Central	0.02	1.88	1.03	0.55	5.96	9.44
Copperbelt	0.00	0.46	0.00	0.78	1.90	3.13
Eastern	0.00	3.24	0.41	0.29	2.98	6.91
Luapula	0.44	0.27	0.15	0.01	4.18	5.06
Lusaka	0.00	1.13	0.41	0.39	0.26	2.19
Northern	0.31	1.44	1.77	0.10	11.16	14.78
Northwestern	0.00	2.47	0.63	0.49	8.99	12.58
Southern	0.25	1.69	0.94	1.10	4.56	8.54
Western	0.03	3.81	0.89	0.00	7.94	12.67
Total	1.05	16.38	6.23	3.70	47.92	75.29
Percent Total	1.39	21.75	8.27	4.91	63.64	100.00

Source: Government of the Republic of Zambia, 1994: Agricultural Sector Investment Programme, Land Use and Administration Sub-Programme, Ministry of Agriculture, Food and Fisheries.

Land is classified into two categories - State land and traditional land. Traditional land accounts for 96% of the total land, while 4% is state land. All land is vested in the

President of the Republic of Zambia. The administration of state land is through the Commissioner of Lands, while Traditional Rulers (Chiefs) control traditional land. There is no freehold land tenure. Leasehold tenure in state land provides for title deeds for a renewable period of 99 years.

4.1.3 Farmers' Characteristics

Zambian agriculture is characterised by three categories of farmers: small-scale farmers, medium-scale farmers, and commercial farmers.

Small-scale farmers are in the majority, estimated at between 600 and 800,000 farm families. Within the small-scale category, there is a sub-category called *Emergent Farmers*. This is a transition stage between small-scale to medium-scale.

Characteristics of the small-scale sub-sector are:

- Production is dominated by traditional subsistence crops.
- Land cultivated is between 0.5 – 2.5 hectares, although the size of the holding may be up to about 9 hectares (MAC 2002).
- Cultivation is mostly by hand hoe, although ox cultivation was practised before the cattle population was decimated by diseases.
- Low labor and low land productivity due to lack of better technologies or lack of means to apply better technologies.
- Use of family labor.

As shown in Table 4.2, the traditional subsistence crops are cultivated according to the agro-ecological zone where they are best suited.

Table 4.2: Subsistence Crops by Agro-ecological Zone

Region I	Region II	Region III
Maize	Maize	Cassava
Sorghum/Millet	Cassava	Sweet Potatoes
Groundnuts	Sweet Potatoes	Maize
Sweet Potatoes	Groundnuts	Mixed Beans
Cowpeas	Sorghum/Millet	Millet

Some small-scale farmers, often emergent farmers produce food crops that are sold on the local market when there is a surplus. These include maize, groundnuts, sorghum, mixed beans and sweet potatoes. Cash crops, which are cultivated in the sub-sector, are cotton, tobacco and rice.

Medium-scale farmers, estimated at about 25,000 farm families, cultivate larger areas than the small-scale farmers do, ranging from 2.5 to 200 hectares. In addition to producing for subsistence, they also produce for commercial purposes. Cultivation may be by hand hoe, ox-drawn implements or tractor. Hired labor may be used. Crops that are produced for commercial purposes are shown in Table 4.3 below.

Table 4.3: Medium-scale Farmer Cropping Patterns

Region I	Region II	Region III
Maize Groundnuts Cotton Soya Beans Paprika Sunflower	Maize Groundnuts Cotton Soya Beans Paprika Mixed Beans Sunflower Sweet Potatoes	Maize Mixed Beans Sweet Potatoes Coffee Rice

Large-scale farmers number about 740. They cultivate areas larger than 60 hectares (Source: ACP, MAC, 2001) and produce commercial crops for both the local and export markets. These include maize, soya beans, coffee, fresh vegetables, tobacco, paprika, sugarcane, and cotton.

The large-scale sub-sector is characterised by:

- High level of technology and mechanisation.
- Economic yields.
- Source of employment.

Most of the large-scale farming activities are concentrated in state land along the line of rail and in Eastern Province.

4.1.4 Crop Production Trends

Maize has dominated Zambian agriculture, both as a staple food crop and commercial crop. Maize production was promoted beginning in the 1970s by Government policy in all the three ecological zones without regard to comparative suitability. The declining yields of maize in the main maize producing areas due to drought, floods and/or declining soil fertility, has led to serious food shortages and a drop in rural incomes. To mitigate these adverse effects the Government has been promoting crop diversification. The essence of this is to promote growing of crops, which can give reasonable yields to ensure household food security in spite of adverse weather conditions. The crops being promoted under this programme are sorghum, cassava, sweet potatoes, cowpeas and various varieties of drought tolerant or early maturing varieties of maize. After the severe drought of the 1990/91 season, diversification away from maize has accelerated although much slower in traditional maize areas. The need to diversify crop production in response to the changing weather pattern and economic environment, such as market liberalisation, has had a great influence on crop diversification. Four crops that have increased fast in response to the changing environment are; groundnuts (76%), cassava (65%), sweet potatoes (54%) and cotton (65%). (Source: Is the Glass Half Full or Half Empty?, Zulu B, Nijhoff J. J., Jayne T. S., 2000). See Table 4.4.

Table 4.4: Percentage of Total Area Cultivated in Crops By Farm Category

Crop	Year	All Small Holders	Male headed	Female headed	Small Scale	Med. Scale	Zone I	Zone II	Zone III
Maize	93/94	59.03	59.76	54.75	57.05	68.98	49.87	71.14	33.94
	94/95	57.81	57.5	59.22	56.16	69.02	53.35	69.75	40.99
	98/99	44.16	44.65	41.99	43.32	56.58	35.50	61.38	21.15
	99/00	48.37	48.69	46.86	46.87	59.55	37.06	66.35	24.19
Small Grains & Tubers	93/94	55.98	21.95	29.03	26.14	7.07	40.62	8.00	47.77
	94/95	23.53	23.51	23.62	25.91	4.27	45.53	7.62	50.75
	98/99	35.58	35.34	36.68	37.25	10.97	54.83	12.50	64.02
	99/00	36.93	36.56	38.65	39.21	20.10	57.12	14.62	65.15
Cash Crops	93/94	6.51	7.19	2.53	5.09	13.68	7.07	9.71	0.86
	94/95	6.81	7.29	4.57	5.99	12.40	0.73	13.11	0.62
	98/99	6.68	7.15	4.52	6.03	16.14	2.80	11.58	0.57
	99/00	4.78	5.08	3.45	4.43	7.49	1.34	8.33	0.40
Legumes & Oil Seeds	93/94	10.28	10.00	11.94	10.39	9.72	2.43	11.93	8.04
	94/95	11.04	10.91	11.64	11.10	10.64	0.39	10.15	13.46
	98/99	12.17	11.49	15.30	12.26	10.97	5.06	13.16	12.91
	99/00	8.51	8.28	9.56	8.32	9.92	3.34	8.97	9.34
Other Crops	93/94	1.20	1.10	1.75	1.33	0.54	0.00	0.61	2.33
	94/95	0.82	0.79	0.98	0.84	0.67	0.00	0.63	1.23
	98/99	1.41	1.38	1.51	1.14	5.33	1.81	1.37	1.35
	99/00	1.40	1.38	1.47	1.18	2.94	1.24	1.74	0.93

Source: Institute of Economic and Social research, 200: Key Performance Indicator at the District Level, University of Zambia, Lusaka, and calculated from PHS data for 1999/00).

Although there are positive indicators in crop diversification, sustained increases in cultivated areas and production will depend on the development of reliable and growing markets. As growing of traditional crops is within the means of small-scale farmers, putting in place measures to expand the market for those crops would be one of the essential strategies to improve farmers' market participation and increase their incomes.

4.1.5 Livestock

Livestock that form an integral part of the farming system in the small-scale sub-sector are cattle, goats, pigs and chickens. Cattle are very important in household food security. Firstly, they are a "reserve bank" from which cash can be obtained in times of dire need for food. Secondly, they are a source of important draft power used to improve labor productivity. Households owning oxen are able to cultivate larger areas than hand hoe cultivators. Unfortunately, the majority of households have lost most of their cattle through diseases. Thirdly, they are a source of manure, which can be used in place of chemical fertilisers.

In 1993, before diseases in Southern, Central and Eastern Provinces reduced the cattle population; slightly over 50 per cent of the land under crops were cultivated using oxen. That is, out of 904,820 hectares under crops, 467,878 hectares were ox cultivated. In 2000, the area cultivated with a hoe had increased by 90 percent. (Source: FPM Sub-

programme). As will be seen from Table 4.5 below the area under cultivation has not increased over a number of years in the four provinces where ox-cultivation was more widespread. A programme under the Agriculture Sector Investment Programme (ASIP) to improve labor productivity using drought power based mechanisation had only limited success due to following main constraints stated elsewhere in this chapter. Goats, pigs and chickens are a good source of income for rural populations.

Table 4.5: Area Cultivated, Area per Household, Percentage of Producers with Cattle and Oxen in Southern, Central, Eastern, and Lusaka Provinces

PROVINCE	SOUTHERN				CENTRAL			
<i>Harvest Year</i>	1997	1998	1999	2000	1997	1998	1999	2000
Area Cultivated	199,705	175,414	232,443	N/A	123,543	126,512	N/A	N/A
Area /Household (ha)	1.86	1.6	1.93	N/A	1.47	1.58	N/A	N/A
Producers with cattle (%)	39.71	33.4	36.78	N/A	15.89	10.9	N/A	N/A
Producers with oxen (%)	13.1	13	N/A	N/A	10.4	10.4	N/A	N/A

PROVINCE	EASTERN				Lusaka			
<i>Harvest Year</i>	1997	1998	1999	2000	1997	1998	1999	2000
Area Cultivated (ha)	273,312	286,264	276,736	286,736	27,312	18,888	17,284	108,058
Area /Household (ha)	1.4	1.49	1.47	1.53	1.4	1.18	0.99	1.01
Producers with cattle (%)	24.43	29.5	20.5	21.8	13.56	12	14.22	11.14
Producers with oxen (%)	18	18	16.4	15.96	3.6	3.7	8	4.49

Source: Central Statistical Office, *Post Harvest Surveys*

Livestock marketing is entirely in the hands of private sector or traders. Even during the time of central command economy in Zambia (parastatals), the private sector was participating alongside public sector in livestock marketing. There are two major marketing companies for beef cattle – Zambeef and Keembe Cold Storage Company. These have replaced the Cold Storage Board of Zambia, which was a parastatal. A number of butchers are also active in cattle marketing. The pig industry, which had faced extinction in the mid-80s, has now been revived and there has been an emergence of private sector processors of pork products.

The dairy industry has both large and small-scale producers. The large producers are dominating the formal market, while small producers operate in the informal market. Large milk producers sell their milk to Parmalat Zambia Limited in Lusaka and Copperbelt, and Finta Danish Dairies in Livingstone. There are a number of small on-farm processors on cottage industries, which provide outlets to small producers in the

neighbourhoods. The capacities of the cottage industries are limited and are, therefore, not a guaranteed market.

4.1.6 Fisheries

The fishing industry is a very important socio-economic activity for improving rural incomes. The industry has two sub-sectors: capture fisheries and aquaculture (fish farming).

The capture fisheries comprise the main rivers, lakes, flood plains and swamps. Exploitation of the capture fisheries is dualistic - commercial and artisanal (small-scale). Artisanal fishing is characterised by low investment and technology while commercial fishing is high-level investment and technology.

Total fish production has stagnated at 60,000 – 70,000 metric tons per annum from both capture fisheries and aquaculture, compared to the national demand of 100,000 or more metric tons. In the artisanal industry, the main factors for low production are (a) lack of improved fishing technologies, (b) inadequate provision of extension services; (c) high post-harvest losses; (d) unavailability of appropriate credit; and, (f) decline in fish stocks. (Source: Fisheries sub-program, Ministry of Agriculture, Food, and Fisheries (MAFF), Paper presented to Agricultural Consultative Forum, 2000).

Small-scale aquaculture production is from fishponds and community dams. The greatest potential for fish farming is in Region III and to a less extent in Region II. In 2001, there were about 10,000 fish farms with 13,000 fishponds in the two Regions. Production at 22Kg from each pond per annum for two cycles has been below the expected 30Kg/annum. Production from communal dams mainly in Region I have been difficult to estimate due to management problems. Production from aquaculture was estimated at 10,000 metric tons per annum in 2001.

4.1.7 Agricultural Marketing Structures and Systems

Important policy changes that took place in 1992 under the Movement for Multiparty Democracy (MMD) Government were (a) price liberalisation for crops and inputs; (b) abolition of subsidies on maize and fertilizer; (c) opening of crop and fertilizer markets to the private sector; and (d) abolition of the role of co-operatives and public sector in marketing.

Absence of the parastatal sector and co-operatives in crop and input markets left a vacuum which, it was believed, could be filled by the private sector. The private sector, on the other hand, did not have the capacity to fill the vacuum. Attempts were therefore made to build private sector capacity through the formation of Marketing Credit Revolving Fund (MCRF) and the Agricultural Credit Management Programme. Also, the Food Reserve Agency (FRA) was established in 1995 to manage a strategic national food reserve became involved in channelling funds to the private sector through a loan system for maize and import marketing. Unfortunately, huge sums of money have been lost

through these organizations due to very low loan recoveries. In the case of FRA, the recovery rate ranges from 20 to 40 percent. By July 2002, FRA was still trying to recover K 15.3 billion owed to it. The other two programmes only lasted two seasons.

The factors that have adversely affected a sustained private sector participation in output and input markets are:

- Inconsistencies in Government policy: This is demonstrated by the involvement of Government through FRA activities in importation and pricing of fertilizer and maize. The revival of the cooperatives that will be involved in marketing of outputs and inputs is another example. More recently, the creation of a Crop Marketing Authority which will function like the former National Agricultural Marketing Board (NAMBOARD). These inconsistencies have greatly eroded private sector confidence in the system.
- High cost of transactions in the rural area: Due to poor infrastructure such as roads, telecommunications and storage facilities: inadequate market information and long distances to markets in high consumption centres.
- Inadequately developed farmer groups: If farmers groups were well organised, they would facilitate marketing by organising central depots where produce could be bulked. Group organization for market facilitation is an essential element for effective private sector participation in market and entrepreneurship development.
- Availability of storage: Availability of suitable storage for crops would enable farmers to store their produce until the demand was high in central markets.
- Loss of trust in private sector by farmers: Rural farmers have lost trust in private traders, some of whom offer prices far below cost. (See Table 4.6). Some have swindled farmers by not paying for produce. This underscores the need for farmers to bargain in organised groups. A regulatory framework to govern the conduct of unscrupulous traders has been advocated for by some farmers. The mistrust in private traders has influenced farmers to call for creation of a public sector controlled marketing organization. Table 4.6 below is indicative of loss of confidence in markets.

Table 4.6: Smallholder Confidence in the Private Sector (Percentage)

	1990/91	1993/94	1995/96	1996/97	1997/98	1999/00
Central	77.23	51.57	42.00	38.20	39.90	35.17
Copperbelt	55.07	51.64	22.00	31.39	38.70	48.64
Eastern	60.65	48.15	41.00	40.02	37.40	49.94
Luapula	34.78	48.04	57.00	37.25	38.20	32.31
Lusaka	55.91	42.69	21.00	23.96	33.90	30.50
Northern	55.22	57.93	38.00	31.41	32.30	36.09
North-Western	44.68	48.13	27.00	28.51	30.97	35.00
Southern	83.48	41.75	23.00	31.83	23.90	49.10
Western	26.02	16.34	13.0	19.24	9.40	27.84
Zambia	54.69	46.63	35.00	33.01	31.80	40.00

Source: Institute of Economic and Social Research, 2000: Key Performance Indicators at the District Level, University of Zambia, Lusaka and Calculated from PHS data for 1999/00.

4.1.8 Emerging Developments in Markets

In recognition of the central role access to markets plays in agricultural productivity, a number of organizations are taking part in market facilitation or integration. There are several forms of market integration or facilitation:

- Resource providing contracts in which an agro-business firm provides resources on credit for production of a product. The farmer undertakes to sell to the firm and to repay the credit in cash or kind. Examples are Clark Cotton and Dunavant Zambia Limited for cotton, Omnia Fertilizer Zambia Limited for maize, Amanita Zambiana for soya beans, sunflower and maize. This is a way of availing credit to small-scale farmers.
- Management and income guaranteeing contracts. This is the form used in out-grower schemes. The farmer agrees to grow produce of specific quality at pre-determined price and guaranteed market. The contractor provides credit inputs and capital items (if required) and extension service. Out-grower schemes run by Agriflora Limited and Cheetah Zambia Limited for fresh vegetables and paprika, respectively, are organised on this basis.
- The third form of market integration involves an entrepreneur between the agro-firm and the farmer. The firm lends all the inputs to an entrepreneur for on lending to farmers. The entrepreneur gets a commission and collects loan repayments. Dunavant Zambia is using this on a pilot basis. Another form of market facilitation used by CLUSA is formation of Rural Business Groups with depots where farmers' produce is bulked so that buyers can collect it from central locations. Other organizations that form Farmer Groups to facilitate provision of marketing and other services by the private sector are CARE International and the Smallholder Enterprise and Marketing Programme (SHEMP). The Economic Expansion in Outlying Areas (EEOA) programme and the Rural Investment Fund (RIF) develop infrastructure, which facilitate marketing.

4.1.9 Constraints

The main constraints in agricultural development in the last decade are:

- Lack of capacity to generate appropriate policies. There appears to be a serious lack of capacity within Government to generate policies to respond to the changing environment. There are also inadequacies in implementing existing policies. For example, when ASIP was being designed, it was envisioned that some functions of MAC (then MAFF) would be divested, such as privatisation of veterinary services, divesting some extension service to the private sector, and divesting of functions of the National Agricultural Information Service (NAIS). Very little has been implemented. In addition very little has been done to create a conducive environment for the private sector in the liberalised economy.

- Lack of clarity and consistency in the application of the policy of liberalisation in the agricultural sector. In 1992 Government liberalised output and input markets and prices. Government has, however, continued to intervene in a number of ways especially through the operations of FRA, which have left the private sector uncertain about Government intention. The recent Government decision to create a crop-marketing agency is the latest in the apparent contradictions in Government policy on liberalisation.
- Under-developed markets. The centrality of markets as a major motivating factor in determining farmers' production outputs has not been fully recognised by Government. The success of the proposed ACP will depend on market development and linkages. The programmes, which various organizations are implementing in market linkages, should be intensified and made sustainable.
- Weak private sector. At the moment the private sector cannot effectively participate in the agricultural industry due to constraining factors, such as lack of working capital and high cost of commercial borrowing. Government has to develop a deliberate policy of empowering the private sector. It is the Government that has the authority to initiate national policy and provide conducive environment for the policy's implementation.
- Poor infrastructure. Lack of infrastructure development in rural areas is a major limiting factor in the delivery systems for agricultural productivity. Good feeder roads are necessary for efficient transportation of inputs and outputs. Telecommunication facilities are almost non-existent in some rural areas. Rural electrification ought to be given high priority in areas with small-scale irrigation potential. Lack of storage facilities makes it impossible for farmers to store and preserve their produce in order to sell when market prices are favourable.
- Labor constraints. These can partly be addressed by adoption of drought power mechanisation, using oxen or donkeys in the small and medium scale sub-sectors. Lack of labor saving tools or implements has greatly limited the amount of land cultivated. The Farm Power and Mechanisation Sub-programme under ASIP developed a number of technologies whose adoption rate was low mainly due to lack of means to apply the technologies. (See Table 4.5 presented earlier.) Promotion of conservation farming/conservation tillage has helped in reducing labor requirements for land preparation, although initially labor demands may be high. Weeds, which are a major problem in between rows and planting stations, can be controlled by use of a weed wipe, which is an effective low cost technology. Another factor seriously undermining labor productivity is HIV/AIDS. Numbers of productive persons in households have been reduced through illness and death.
- Inadequate availability or complete lack of microfinance for rural farmers. Credit is required for technology packages. During the Sector Performance Analysis

(SPA) in 2001 a number of farmers in the Eastern Province said that the pilot micro-credit scheme run by Africare was good. A farmer is given options of technology mixes, including drought animals and implements if required. Training is an important component of the package. Other forms of credit as made available in out-growers schemes enable only large-scale farmers to grow specific commodities, which are of interest to the out-grower operator.

- Inefficient dissemination of information. Effective dissemination of technical and market information is necessary to help farmers make right and timely decisions. Some factors affecting effective dissemination of information are (i) inadequate resource allocation at the grass-root extension providers; (ii) failure to prioritise tasks by the information providers; (iii) inadequate training of extension staff; (iv) low morale among civil servants' (v) inadequate participation by the private sector in provision of services to the farmers.
- Lack of sustained cooperating partner coordination. A group of farmers who were interviewed said:

“We are tired of donors coming one after another seeking similar information. What we want now is implementation.”

- Lack of Title Deeds to land. There are no title deeds to land that are owned by the majority of rural farmers. Some leasehold titles of less than 99 years may be obtained in traditional land, but the procedure is long and the move is usually unwelcome in a number of communities. The consequences of this are firstly, as there is no security of tenure, there are no incentives for developing and caring for the land. Secondly, land cannot be used as collateral for credit.
- Discriminatory ownership of land. Land ownership system is discriminatory in favour of male farmers. Most of the land in both traditional land and state land is owned by male farmers. In recognition of this, the Government has now directed that 30% of the successful applicants for land - whether residential or agricultural - should be females.
- The constraints in the small-scale fish farming include inadequate supply of fish seed and fingerlings to stock the ponds to optimal levels. Although fish seed and fingerling production has been liberalised, there has been no meaningful participation from the private sector. The Fisheries Extension Branch has formulated good fish feed, but no entrepreneur has taken up commercial production. Access to reliable market for fresh fish is constrained by unavailability of commercial cold storage facilities. Other problems are poor management due to inadequate training and unavailability of good fish food.

By its multi-sectoral nature, agriculture requires many players – Government, private sector and NGOs. Efforts of these players need to be coordinated to optimise resource utilization. Some mechanism should be put in place to effect the coordination.

4.2 GRZ, USAID and Other Donor Efforts

The GRZ, USAID and other donors all support on-going activities to develop Zambia's agricultural potential. It is now widely accepted in the country that with the stagnation of the mining industry, agriculture must play the role of the economy's prime mover.

4.2.1 Government of the Republic of Zambia

The Government of Zambia's major efforts in agriculture are in a transition stage. The ASIP has recently ended and the follow-on project is still in the development stages.

Past Efforts - Agricultural Sector Investment Programme (ASIP)

ASIP was the biggest sector investment programme undertaken in Zambia. It was designed originally as a 5-year programme and started in 1996. The programme comprised 13 sub-programmes, which were built around 4 priority or thematic areas – policy and institutional improvements; public investment; private sector investment and pilot investment schemes. ASIP was intended to address the Government's stated macro-economic development objectives by attaining the following goals and objectives of the agricultural sector. These were:

- To ensure national and household food security through sustainable production.
- To ensure the maintenance and improvement of the agricultural resource base.
- To generate income and employment.
- To contribute to sustainable industrial development.
- To significantly expand the sector's contribution to the national balance of payment.

ASIP was founded on a programme rather than project approach. It was hoped that the more than 150 different projects being implemented at the time would be integrated into the various ASIP sub-programmes and that donors would subscribe to the concept of basket funding. A few bilateral donors, however, opted not to join the basket funding.

At the end of ASIP, there were more failures than successes recorded. Some of the critical factors, which led to ASIP failures, were:

- Donors not fulfilling their funding commitments; only 67.3 percent of donor funds were released, while the Government released only 41 percent of its commitments.
- Lack of an effective decentralised institutional framework at the grass-root level.
- Faulty design that did not take into account the potential and comparative advantages of each district.
- Weaknesses in the operations of the Financial Management Unit (FMU).
- The policy of privatisation of non-core functions of MAC (then MAFF) was not effected.
- "Ownership" of the programmes at the grass-root was non-existent.

- Private sector participation was very weak except in the seed industry where after 1992 a number of private seed companies sprung up and about 400 licensed traders were taking part in the industry by 2000.

Current Efforts

The current Government role in agriculture consists of:

- Policy formulation and providing guidelines in the interpretation and implementation of the policy.
- Provision of essential information necessary for agricultural development.
- Enforcement of a regulatory framework in the agricultural industry.
- At the farmer level, Government through its various departments is the largest services and information provider throughout the country. The provision of services is generally inefficient and ineffective. The Government is also running some settlement and irrigation schemes. Due to the broken down infrastructure, productivity in the schemes has declined to very low levels. Similarly, training in farmer training centres and farm institutes is Government's responsibility. However, due to budgetary constraints, the infrastructure is dilapidated to such an extent that no training can ever take place in these institutions. Organization and provision of extension and other community-based services and improvement of training infrastructure are areas within the comparative advantage of USAID and other donors.

In response to Government concerns about reducing poverty, the PRSP has included the following interventions in agriculture:

- Completing the policy reform set out at the beginning of 1990s.
- Institutional capacity building.
- Approving the agricultural policy and guidelines with regard to output and input markets.
- Initiating legal and policy reforms to create an environment that is conducive to investment in agriculture.
- Reviewing the Land Act of 1995 with a view to assessing the implementation process and setting up a land administration system to meet emerging demands.

Government is initiating a new programme called the Agricultural Commercialisation Programme (ACP). The Programme recognises the importance of markets as a stimulus to agricultural production. ACP is a five-year programme that will start in 2003. It will cover the following thematic areas:

- Market linkages and commercialisation.
- Entrepreneurship development.
- Recapitalisation and revitalising the viability of agriculture.
- Demand-driven services.
- Improving management and co-ordination of agricultural resources.

4.2.2 USAID

USAID's interventions in agriculture have been directed at increasing incomes of targeted rural groups. This has necessitated working with MAC and other stakeholders in policy dialogue, information gathering to facilitate policy framework improvements and small farmer outreach. In order to participate effectively in policy dialogue, USAID supports the Agricultural Consultative Forum (ACF) by facilitating dialogue involving Government, donors, NGOs and private sector. ACF is an important institution for initiating policy issues, which are followed up by MAC or other Ministries.

There are three USAID-supported programmes, which generate information used in policy framework improvements. The **Food Security Research Project** (FSRP, contract to Michigan State University) generates research information which can guide policy formulation and strengthens the capacity of the Agriculture Information Centre (AMIC). The Early Warning Data Base Unit and CSO benefit from the research information generated by FSRP. The funding for 1999-2002 period is US\$4.9 million. The **Famine Early Warning System Network** (FEWSNET), through USAID/Washington provides information on the food situation in the country. Since the valuable services provided by FSRP and FEWSNET are not duplicated by another organization, there is merit in USAID continuing to fund these activities. The third effort is ZAMTIE, whose operations were discussed in the previous chapter.

In Small Farmer Outreach Services, USAID funds activities which make it possible for small-scale farmers to participate effectively in liberalised markets. The project's activities centre on formation of farmer groups and capacity building.

Cooperative League of the USA (CLUSA)

CLUSA's Rural Group Business activities cover Southern Province (Choma, Namwala, Monze), Central Province (Chibombo, Mumbwa, Kapiri Mposhi), Lusaka Province (Chongwe). Activities will be extended to the Copperbelt Province. The crops that are being promoted are maize, soya beans, sunflower and paprika. In the Eastern Province the emphasis is on groundnuts. Growers are linked to Malawi agribusinesses. CLUSA is one of the organizations actively promoting conservation farming (CF). Farmers adopting CF practices get increased yields: some farmers' maize yields double, soya beans yields increase by 16 percent. Currently CLUSA's programmes cover 3,500 farmers. Loan recoveries have over a three-year period progressively improved from 67 to 74 to 95 percent. The funding for CLUSA's activities is US\$8.5 million. Opportunities that could be further exploited are:

- Irrigation using treadle pumps; this would enable farmers to grow paprika using supplementary irrigation and grow crops such as tomato for agro-processing, and green maize.
- Increased promotion of maize, soya beans and paprika if treadle pumps were used.
- Introduction of herbs.
- Introduction of pigs in the farming system.

- Improved cassava production.

CARE International

CARE International has been implementing the Livingstone Food Security Project (LFSP). The project, which ended in June 2002, employed the same principles of group formation and addressed the following:

- Strengthening institutions, including farmer groups.
- Farming systems.
- Water harvesting technologies.
- Seed multiplication, distribution and storage of seed (Seed Bank).
- Animal disease control and introduction of livestock auxiliaries. The LFSP covered about 4,000 farmers, but had spill over effects.

If the project were to continue, the following are seen as priorities:

- Seed bank.
- Water harvesting.
- Livestock (cattle) management.
- Conservation Farming (CF).

Zambia Agribusiness Technical Assistance Center (ZATAC)

The main objective of ZATAC is to improve the quality of life of rural population. To do this, ZATAC is promoting development of agribusinesses that can work with producers and rural entrepreneurs. In agriculture ZATAC has supported Agriflora Zambia Limited in out-grower schemes for fresh vegetables and Land O'Lakes for rural dairy farmers in Kazungula. Other ZATAC supported activities are Katuba organic coffee growers and about 4,000 households producing honey in Mwinilunga and Mpongwe.

Land O'Lakes

Land O'Lakes is a co-operative based in the United States of America with 300,000 members. It manages donor-funded, primarily USAID, development projects in many parts of the world. In Zambia, it is implementing a programme called the Zambia Dairy Enterprise Initiative that promotes milk production in Kazungula in Livingstone District. ZATAC Ltd. is responsible for developing milk collection centres. A total of three centres are targeted of which one is already operational. Finta Danish Dairies is doing the buying of milk from collection centres. Finta Danish Dairies has been using imported powder to reconstitute its product. It is also importing about 4,000 litres per day of milk from New Zealand. There is a real opportunity here for local production to replace imports. Other donors working in dairy sub-sector are:

- The Netherlands in animal health and disease control.
- Belgium also in animal health and disease control.
- Heifer Project International provides in-calf heifers, usually one per farmer, and the farmer gives the first heifer from his/her animal to the neighbouring farmer.

- Golden Valley Agricultural Research Trust (GART) conducts research in animal production to general management systems suitable for all levels of farmers.

Agribusiness in Sustainable Natural African Plant Products (ASNAPP)

Agribusiness in Sustainable Natural African Plant Products (ASNAPP) is a new project that started in 1999 in Zambia to provide regional co-ordination covering South Africa, Zimbabwe, Mozambique, Madagascar, Ghana, Nigeria, Guinea, Rwanda, Kenya and Uganda. ASNAP will promote production of high value new crops, which will include spices and extractions such as essential oils. It will provide market linkages, capacity building for sustainable production business or entrepreneurship development, and quality control facilities. As ASNAPP works with existing groups, linkages with other implementing agents are necessary. It has also established a linkage with Organic Producers and Processors Association of Zambia (OPPAZ) which is promoting organically produced crops. There are already 2,000 square kilometres of land and 2,600 farmers certified as organic producers in Zambia. ASNAPP activities will concentrate in these areas.

The activities of ASNAPP will open new opportunities of crop diversification among small-scale farmers. It is, however, observed that as the market is a specialised one, it may not absorb large numbers of farmers.

Zambia Agricultural Commodity Authority (ZACA)

ZACA supports warehousing of agricultural commodities, mainly grain, for which warehouse receipts are issued. There is currently one licensed warehouse manager in the country. Warehouse receipts have the potential of being used as collateral for agricultural credit. The activities of ZACA need to be strengthened and expanded to cover rural areas where there are warehouses. This would enhance access to credit for small scale farmers.

4.2.3 Other Donors

World Bank

After ASIP which was the major World Bank supported programme in the last six years, the World Bank will now support ACP, the successor to ASIP, through the Agricultural Development Support Programme (ADSP). ADSP's main objective will be to increase agricultural productivity and stimulate agricultural diversification and commercialisation, in an environmentally sustainable way. Within ADSP, the Bank recognises the need to support selected core functions of MAC. These are:

- Control of tick borne animal diseases.
- Demand-driven applied research.
- CF through ZNFU and the Conservation Farmers Union (CFU).
- On-farm seed multiplication for selected crops.

The specific objectives of ADSP will be:

- Promoting a pluralist, demand-responsive agricultural extension system; and providing support to generate adaptive technology that responds to stakeholder needs.
- Promoting agricultural diversification and commercialisation of smallholder agriculture by promoting *inter alia* linkages between the farmers and agribusinesses; market development; development of productive infrastructure and income generating enterprises.
- Strengthening implementation arrangements at the central Government, district and grassroots levels particularly by decentralising planning, implementation and resource management of agricultural and rural development initiatives; enhancing the capacity of District Councils (DCs) and other farmer-focused partners and service providers; and by empowering farmer organizations to plan and implement community-based rural development initiatives at the grassroots level, and strengthen their capacity to perform these tasks.

Swedish International Development Agency (SIDA)

The Swedish International Development Agency (SIDA), like the World Bank, is working on a new support programme for agriculture, which will have the overall goal of reducing poverty, enhancing food security and increasing food production. The current activities are concentrated on the land management and conservation farming project, seed production and distribution, and entrepreneurial skills development through the activities of EEOA. In addition, SIDA supports policy, planning, monitoring and evaluation of ASIP activities and Smallholder Access to Processing and Seed (SHAPES). The new Agricultural Support Programme (ASP) will cover three thematic areas, seed, land management and entrepreneurial skills. ASP will operate in four provinces – Eastern, Southern, Central and Northern Provinces. The Programme will be for a three-year period, 2003-2005 with a possible extension of two years.

The Netherlands

The Netherlands is supporting the following activities:

- Through GART, supports smallholder livestock development and management.
- Animal production and health services and livestock sector policies.
- Natural Resources Development College/Zambia Export Growers Association (NRDC/ZEGA) Training Trust for horticultural and floriculture.
- Phytosanitary control through Mount Makulu Research Station.
- RIF (operational funds) in partnership with the Zambian Government.
- ZACA – which is responsible for warehouse receipts programme which can be used as collateral.
- ACF – together with USAID and other co-operating partners.
- Copperbelt Livelihood Project which is implemented through CARE International to improve infrastructure in high density areas of Ndola and Kitwe and to promote socio-economic activities.
- Palabana Farm power and Mechanisation Centre.

Norwegian Agency for International Development (NORAD)

NORAD supports the Farmer Association Project in Southern Province (Choma, Monze, Siavonga), Central Province (Chibombo, Mumbwa, Kabwe), North-Western Province (Mwinilunga) and Western Province (Kaoma); as well as ACF.

Japanese International Co-operating Agency (JICA)

The following efforts are supported by JICA:

- Fisheries through JICA's support for Mwekera on the Copperbelt has been transformed into a national aquaculture research centre.
- Pilot phase – Luangwa/Chongwe Community Action Plan; using PRA farmers' problems and solutions are identified and action taken. After the pilot phase, Chongwe will now have a full comprehensive project.
- In the Western Province JICA is involved in pilot project for rice production.

International Fund for Agricultural Development (IFAD)

Some of the programmes supported by IFAD are:

- Southern Province Household Food Security which covered all districts of Southern Province.
- Rural Enterprise and Agri-service Promotion Programme in Copperbelt Province.
- Smallholder Enterprise Marketing Programme (SHEMP).

African Development Bank (ADB)

The African Development Bank (ADB) supports the Eastern Province Rural Credit Facility.

Food and Agriculture Organization (FAO)

The Food and Agriculture Organization of the United Nations (FAO) supports the Smallholder Irrigation and Water Use Programme, and collaborates with MAC on a number of programmes to promote organic and pilot projects in vegetable growing, goats, agriculture, poultry, and women's clubs.

Belgian Government

The Belgian Government supports improved household food security in Luapula Province, as well as youths and women's clubs.

United Nations Development Programme (UNDP)

The UNDP supports Management of Farm Animal Genetic Resources for SADC countries, and Small Ruminant Development for Smallholder Diversification.

4.2.4 Summary of Interventions Undertaken by Donors

The common goals of most donor interventions are to reduce rural poverty and to ensure food security. To reach the goals the main areas of donor interventions are:

- Market linkages or facilitation programmes which involve formation of farmer groups using any of the existing models including out-grower models.
- Capacity building for farmer group members and the leaders.
- Entrepreneurship development so that farming can be treated as a business and improve non-farm incomes.
- Programmes aimed at improving labor and land productivity including CF.
- Crop diversification programmes that are aimed at increasing the chances of household food security and diversifying sources of household incomes. This includes introduction of new products such as essential oils.
- Programmes aimed at strengthening private sector participation in the liberalised economy.
- Policy development and implementation either through support to institutions dealing with policy formulation and implementation or by participating in dialogue.

4.3 Lessons Learned

Zambia has had co-operating partner-supported programmes or projects for a long time. The majority of them are targeted at increasing rural incomes and improving household and national food security, thus reducing poverty. In spite of all interventions with co-operating partner and Government supported projects/programmes, the level of poverty has increased from 69.7 percent in 1991 to 72.9 percent in 1998. Poverty levels are not showing signs of decline. What is the problem?

The biggest and most comprehensive programme that has ever been implemented was ASIP, which ended in 2001 after a second, one-year extension. There are key lessons to be learnt from ASIP, which are applicable to other co-operating partners and Government programmes. The key areas from which lessons can be drawn are summarized in the following sections.

4.3.1 Local Ownership

A number of programmes, which have been implemented, have not involved the beneficiaries from the planning stage. Such programmes are considered to be Government or co-operating partner programmes; there is no commitment of ownership from the beneficiaries. These projects are not sustainable; they collapse as soon as the Government or a co-operating partner ceases to pump money into the programme. Examples are found in some settlement schemes, which flourish as long as the Government or the co-operating partner is pumping money. There should be a weaning stage when the local community supports the activities of the programme.

4.3.2 Participatory Goal Setting

One of the most common causes of unsustainability in projects is the lack of knowledge by beneficiaries on the goals of the project and how individuals fit in. Unless each person

affected by the project appreciates his or her role and benefits, the project will not be sustainable. Knowledge and acceptance of goals by beneficiaries is an important factor for sustainability. Examples exist of projects that have failed due to non-involvement of beneficiaries in goals setting, for example, a number of integrated rural development programmes funded by SIDA have not resulted in sustainable livelihoods of the people, because those projects did not build on existing structures to continue managing the projects sustainably.

4.3.3 Linkages

It is becoming increasingly clear that projects which have market linkages, offer rural people the best opportunity of increasing incomes and food security. Examples are out-grower schemes, which are run by Agriflora Limited, Clark Cotton Limited, Dunavant Zambia Limited, CLUSA, ZATAC and CARE International.

4.3.4 Farmers' Multiple Livelihoods

It is not usually appreciated in the design of projects or programmes that a farmer pursues multiple livelihoods. A project, which focuses on one livelihood or commodity, will not meet the objectives of improving rural household incomes and reducing poverty.

4.3.5 Formation of Farmer Groups

Group mobilisation has become a very important tool in ensuring local support, ownership and sustainability of programmes. MAC uses it in management of water resources in Region I where many community dams were constructed under drought mitigation programmes. Africare was contracted for group mobilisation and capacity building for water utilisation management committees. CLUSA is also involved in formation of rural group businesses, which are given skills not only in farming but also in entrepreneurship. The organised groups are provided with inputs on unsubsidised credit, technology and linkages to markets. There are at least three USAID-supported organizations involved in the formation of Rural Group Business (RGB), namely, CLUSA, CARE, and ZATAC.

4.4 Moving Forward: Opportunities and Constraints

Based on its interviews and secondary research, the assessment team has identified potential opportunities in local, regional and global markets.

4.4.1 Local Market Opportunities

Locally, opportunities lie in:

- Developing markets of traditional crops according to their comparative advantage: The markets can be developed by promoting consumption within the country and by promoting industrial uses of the crops. The crops include cassava,

sweet potatoes, sorghum/millet, mixed beans and groundnuts. These crops can improve food security and improve farmers' incomes. Areas of intervention would be (i) promotion of improved production methods (ii) market linkages between farmer groups and traders who would buy crops for re-selling, or agro-processors using appropriate technology.

- Improving output of marketable crops through irrigation: Out of the potential of 500,000 hectares of irrigable land only about 65,000 are irrigated at present. Large-scale irrigated agriculture produces commercial crops – wheat, coffee, horticultural crops and, to a certain extent, maize. The potential for using surface water for irrigation is greatest in Zone III, while in Zone II surface water and underground water is used. In Zone I underground and dammed water is used. Production under small-scale irrigation is generally for perishable vegetable crops and green maize as cash crops. Interventions required to develop this potential include: (i) low cost technology development for different irrigation systems; (b) a ready supply of appropriate types of pumps financed by a revolving credit scheme; (iii) organization and capacity building for farmer groups; and (iv) development of market linkages. In Buleya Malima irrigation schemes in Sinazongwe District of the Southern Province farmers are growing paprika under contract. The contractor provides inputs on credit and assures a market.
- In livestock there is great potential for an out-grower scheme for milk and pigs. There was a smallholder dairy scheme financed by World Bank in some villages in Monze and Mazabuka Districts. Farmers in close proximity were recruited and allocated at least three crossbred in-calf heifers for which they made contributions from the sale of milk. Milk was collected from designated points. The pig scheme operated in Monze District. Farmers obtained two sows and a boar. The scheme also provided extension services.

Interventions required to make similar programmes work include: (i) identification and organization of farmer groups; (ii) development of market linkages; (iii) capacity building and provision of extension services; and (iv) development of small-scale milk processors/handlers with cold storage facilities.

- There is great potential for small-scale fish farming in Regions III and II in fishponds and in small water bodies in Region I. Interventions required are (i) bringing existing fishponds to full production; (ii) organising farmer groups and links to a market; (iii) organization and provision of extension services; and (iv) development of post-harvest technologies to reduce losses. Overall, the intervention most necessary is the provision of an infrastructure development fund, which can be used discriminatorily according to pre-determined criteria to improve the poor state of infrastructure in rural areas.
- Cotton offers local and regional as well as global opportunities. Seed cotton is one of the most important cash crops for smallholders. It is already an organised out-

grower crop. The intervention required is a legal framework governing credit delinquency, side buying and contract guaranteeing product prices.

4.4.2 Regional and Global Market Opportunities

On the regional and global markets the following crops offer great opportunities: maize, cotton, coffee, soya beans and paprika. Maize has a large market in the neighbouring countries such as Mozambique, Angola, Democratic Republic of Congo and, to some extent, Zimbabwe. The interventions required are:

- A mechanism to stabilise, but not control, maize prices. The large fluctuation in maize price has adversely affected production both by large and small-scale farmers; and
- A policy regulatory framework to strengthen and streamline private sector participation in maize marketing.

Coffee is a world market crop whose prices are determined on the world market. It has the potential of replacing copper as a foreign exchange earner. Both large and small-scale farmers produce coffee in Zambia, primarily in Region III where there is abundant water (ref. Table 4.5). Zambia's position vis a vis regional production of coffee is shown in Figure 4.1 below, and its production trends are shown in the accompanying bar graph.

Table 4.5: Performance of Smallholders Growing Coffee

	Farmer Participation (number of growers)						
Year	1994/95	1995/96	1996/97	1997/98*	1998/99	1999/00	2000/01
Northern Province	230	258	569	626	687	693	402
Luapula Province	145	153	237	138	192	156	142
Copperbelt	23	30	37	49	42	48	52
Total	398	441	843	813	921	897	596
	Production (metric tons)						
Clean Coffee	2159	2562	2962	3600	4530	7980	6880
* The drop in the number of farmers is attributed to the discontinuation of extension services under the Coffee II Project.							

Figure 4.1: Southern African Coffee Production 2000/2001

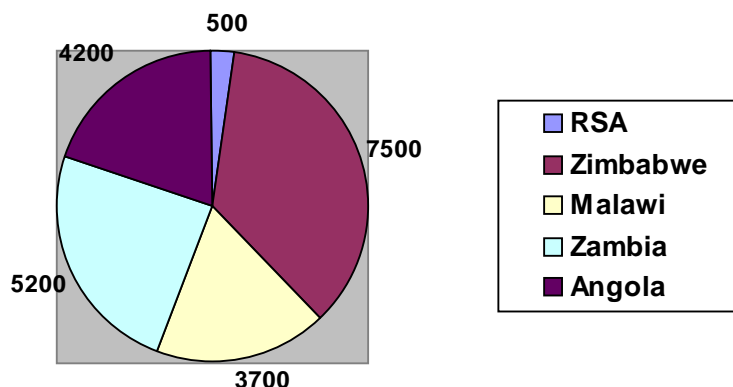
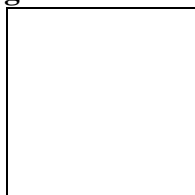


Figure 4.2: Zambia: Past, Present and Future Trends of Coffee Production



Interventions necessary to facilitate this growth in the coffee sector for large-scale producers are:

- Availability of funds for capital developments.
- Strengthening of extension services.
- Provision of funds for central processing facilities for members of the Zambia Coffee Growers Association.

For small-scale coffee growers the following interventions are necessary:

- Organization of Farmer Groups and capacity building.
- Organization of marketing.
- Provision of a line of credit for seasonal inputs and equipment.
- Development of a suitable institution to provide extension and other services to Farmer Groups and individuals.
- Development of Outgrowers' Schemes.

4.4.3 Strategic Interventions for Achieving Rapid, On-going Competitive and Equitable Agricultural Sector Development

The following interventions would contribute to achieving rapid, sustainable competitive and equitable development in Zambia's agricultural sector:

- Development of markets: Support to private agro-businesses that build capacity to market produce at current and increased levels of production. This entails support to various models of out-grower schemes. Reliable markets are key to increased production.
- Institutional support: This would target building capacity for policy formulation and implementation on a short-term and long-term basis.
- Increased information dissemination: This would involve improving private sector, and to a certain extent, public sector capacity to develop appropriate technical and market information for dissemination to stakeholders. The technologies developed should include those aimed at mitigating constraints in labor productivity.
- Crop diversification: Intervention would be required to promote improved agronomic methods of producing traditional crops and to develop markets for these.
- Target cash crops: Intervention necessary is to build capacity of agro-businesses to promote specific cash crops – coffee, cotton, groundnuts and soya beans; and
- Out-grower schemes for livestock: Support to agro-firms dealing in livestock products to engage in out-grower promotion in poultry, pigs and dairy animals on similar model as Land O'Lakes. The activities of Land O'Lakes if expanded would significantly improve incomes of the target groups.

Areas to be considered for various crops, taking into account their suitability, market potential and likely numbers of beneficiaries, are:

Crop	Area/Region
Cassava	All areas in Region III and most areas in Western Province
Sweet Potatoes	North-Western Province and parts of Central Province
Millet	Region III provinces, Zambezi valleys in Southern Province
Sorghum	Valley areas of Southern Province, Central Province, Eastern Province, and Lusaka Province
Cotton	Most areas of Regions I and II, especially valley areas, Eastern Province
Maize	Southern, Central, Lusaka, Eastern Provinces and parts of Northern Province
Groundnuts	Eastern Province
Coffee	Northern and Luapula Princes, Mazabuka District, peri-urban areas of Lusaka and

	Copperbelt Provinces
Soya Beans	Southern, Eastern Central, and Lusaka Provinces
Paprika	Lusaka, Central, Southern and Copperbelt Provinces
Rice	Northern, Luapula and Western Provinces, valley areas of Eastern Province
Fresh Vegetables (out-grower scheme)	Peri-urban areas of Lusaka, Central and Copperbelt Provinces

Specific locations in the provinces should be the subject of a more detailed study.

Suggested areas for other out-grower activities include the following:

Poultry	Peri-urban areas of Lusaka, Central, Copperbelt and Eastern Province
Pigs	Southern (except Zambezi Valley areas), Lusaka, Central and Copperbelt Provinces
Dairy	Areas near large scale dairies, along the main roads and lines of rail

CHAPTER 5: NATURAL RESOURCES SECTOR

5.1 Sector Overview

Zambia is richly endowed with natural resources. Its wildlife resources are abundant and with improved management could be an asset capable of generating significant income for rural populations. The country also has important forest and water resources.

5.1.1 Wildlife

The wildlife resources in Zambia are established in the 22.4 million hectares of land reserved for conservation purposes. The 19 National parks cover over 6.3 million hectares while the 34 game Management areas cover 16 million hectares (Figure 1). These figures place Zambia as among the leading countries with large areas for conservation. There are 44 species and a fairly good number of waterfowls and gallinaceous birds, which are commercially significant. Among the species of major focus in wildlife utilization are summarized in the table, below.

Table 5.1: Commercially Significant Wildlife Species and Their Status

Species	Status of distribution	Status of use
Buffalo, <i>Syncerus caffer</i>	Widely distributed	Regulated
Eland, <i>Taurotragus oryx</i>	Restricted	Regulated
Kudu, <i>Tragelaphus stripsiceros</i>	Widely distributed	Regulated
Roan antelope, <i>Hippotragus equinus</i>	Restricted	Protected but hunted
Elephant, <i>Loxodonta africana</i>	Restricted	No hunting
Sable antelope, <i>Hippotragus niger</i>	Restricted	Protected but hunted
Hippopotamus, <i>Hippopotamus amphibius</i>	Widely distributed	Protected but hunted
Lion, <i>Panthera leo</i>	Restricted	Regulated
Leopard, <i>Panthera pardus</i>	Restricted	Regulated
Lechwe, <i>Kobus leche</i>	Confined to Wetlands	Protected, Regulated
Water Buck, <i>Kobus Sp</i>	Widely distributed	Regulated
Giraffe, <i>Giraffa camelopardalus</i>	Confined to Luangwa and sioma Ngwezi	Protected but hunted
Sitatunga, <i>Tragelaphus spekii</i>	Wetlands but reduced	Protected but hunted
Tsessebe, <i>Damalicus lunatus</i>	Confined to Bangweulu and Barotse wetlands	Protected but hunted
Zebra, <i>Equus burchelli</i>	Widely distributed	Regulated

Hartebeest, <i>Alcelaphus Sp.</i>	Restricted	Regulated
Wildebeest, <i>Connochaetus taurinus</i>	Restricted	Regulated

Main Actors in Wildlife Utilization

The main actors in the exploitation of wildlife can be grouped in to several categories:

- **Commercial Users.** There are over 20 safari-hunting companies, which depend on wildlife for business. These use wildlife for trophies and pleasure, and m major clientele are countries outside Zambia. Secondly, eco-tourism consists a very large group of users who conduct business in the hotel and tour operations. According to current records, there are over 100 companies involved in conducting tourism business based on wildlife resources. Wildlife is use also by individuals who may for trophy as well as for meat, and basically these are people who are non-resident hunters.
- **Subsistence Users.** This group supports a very large population of non-safari hunters and are the local and resident hunters who hunt for food, and other traditional reasons. The bulk of hunters are from the local communities, who are mainly hunting wildlife as a source of food and protein. Nearly every animal in Zambia is eaten. Wildlife is used as a natural capital among rural communities provides an important source of livelihood. However, following the general decline wildlife species and the increased restriction accessibility to the resource has been considerably reduced.
- **Other Users.** The other players in wildlife utilization include a) those who capture wild animals for game farming and zoos; b) research and education; and c) there are groups of people who use wildlife for medicinal purposes.

Whereas the use of wildlife for economic growth has not been diminished and wildlife continues to provide the main stock for various industries particularly tourism and safari industries, the resource continues to decline at an alarming rate. For the most part, the decline of the economy and the rapidly growing human population are singled out as most significant factors causing losses of wildlife resources. Currently, 80 percent of the park system is severely degraded, and nearly all these protected areas are threatened with poaching and human encroachment.

Main Threats and Issues

Effective management of wildlife resources is largely limited by a number of factors:

- **Lack of appropriate manpower.** Ironically, the reduction in the number of workers in Zambia Wildlife Authority (ZAWA) through the restructuring programme appears to have a negative effect on the institution. While the exercise was intended to improve efficiency in the institution, this is not the case today, for example, contrary to the requirement of a minimum of 10km² per person per month for effective management, there are cases at present that as less as three

people are left to man and police an entire national park. In other words, most of the wildlife areas, particularly the remote areas are virtually unprotected.

- Lack of funding resources. Although wildlife resources are considered significant to the country, minimum resources to be invested in the protection and management have not been reached. Zambia Wildlife Authority is so ill funded and poorly equipped that carrying out law enforcement and other programmes has not been possible. Whereas the policy requires that ZAWA generates funds from wildlife harvesting and other similar activities, inconsistencies in the policies have severely hindered this provision. Already, the ban on all hunting of wildlife for now two years has a serious implication on the institutional capacity to manage wildlife resources.
- Poor infrastructure. Effective management of wildlife areas relies on good accessibility. Nearly all wildlife estate has no basic management road network system. Failure to develop good accessibility to areas of resources clearly demonstrates serious hindrance to the economic growth through effective exploitation of the resources. Lack of tourism development in Zambia is in many aspects attributed to inadequate road infrastructure.
- Over-exploitation. Illegal hunting and lack of capacity in determining hunting quotas according to the yield, provide the main causes of over-exploitation. Human population in most Game Management Areas (GMAs) is rapidly growing and this is exerting considerable pressure on wildlife, often resulting in areas being severely depleted. Over half of the GMAs are depleted, and among these are the GMAs located in the West Lunga block in Northwestern Province, Nsumbu National Park block in Northern Province and Liuwa National Park Block in Western Province. Recovery of GMAs remains a major challenge.

Similarly, animal populations in a number of national parks have been drastically declining and in some areas, species have gone extinct. The extinction of the Rhino (*Diceros bicornis*) and the severe decline of the Elephant population from over 100,000 to a mere less than 40,000 in the country in less than 15 years is evidence of the rate of destruction of wildlife resources. Poaching has become excessive, organized and commercialized. It has become a lucrative business. Unless this is checked, further extinction of wildlife species is inevitable.

- Loss of habitat. A habitat is a place where animals feed and breed and each species is peculiar to its own habitat requirements. However, the growing human population, human settlement, expanding agricultural activities, deforestation and fires are factors causing severe disturbances to wildlife habitats. Rapid habitat changes and habitat destruction are largely evident in GMAs where land use conflict is a major concern as land is required for agriculture and settlements. Issues of this nature will need careful immediate and long term planning.

- Lack of information. Effective management of natural resources relies on the availability of information for planning and harvesting. A programme of data collection and monitoring of wildlife does not exist, yet information is required to monitor the trend of populations for the purpose of determining sustainable yield and assessing the impact of regulatory and harvesting activities. A good knowledge of the behavior of the resources provides the basis for their efficient management and minimizes risks of overexploitation.

Institutional Arrangements

The Zambia Wildlife Authority is the institution mandated by law to manage wildlife resources in Zambia. ZAWA was established in 1998 following the repeal of the National Parks and Wildlife Services, and in pursuing its functions, ZAWA is also charged with the responsibility to:

- Facilitate the active participation of local communities in the management of the wildlife estate.
- Promote and develop tourism.
- Enhance the recognition of the economic value of wildlife resources amongst public and private stakeholders.
- Educate the general public.

The functions of ZAWA are directly or indirectly complemented by other institutions including Environmental Council of Zambia, Department of Forestry and the Department of Fisheries. ZAWA is a parastatal organization, located in the Ministry of Tourism, Environment and Natural Resources (MTENR), and although its funding is through Government grants, it is expected to generate its own financial resources to carry out its functions. ZAWA is currently in the process of being established.

As indicated in both the Wildlife Act and Wildlife Policy, ZAWA is institutionally placed to work with local communities in the conservation of wildlife resources, in particular, to facilitate their participation. This is being done through Community Based Natural Resource Management (CBNRM). Areas of focus at present are the Luangwa National Parks block, Kafue National Park block, Kafue Flats and Lower Zambezi. Further linkages with other institutions actively involved in CBNRM include the World Wildlife Federation (WWF), ECZ, and the Community Based Natural Resources Management and Sustainable Agriculture (CONASA) project.

ZAWA's relationship with the local and traditional authorities has developed in the recent years through the evolution of cooperative management of natural resources. This relationship has substantially grown through the Administrative Management Design (ADMAD) since 1985, and its concept spread and covered communities in most areas of the Luangwa National Parks blocks, the Kafue National Park GMAs, Bangweulu swamp, and Kafue flats GMA. Essentially, this calls for local community participation in the management of wildlife including the sharing of benefits accruing from the exploitation of wildlife. The trend has been to shift from Government-centralized management to increased role of local communities, and currently, this role is not only

emphasized in the Wildlife Policy, but it is enshrined in the Wildlife Act of 1998. This marks a drastic change in Government's role of instructing and consulting with communities to a more of advisory capacity as Government moves more toward complete devolvement of power and responsibilities in the management of wildlife resources in all GMAs in the country. Never the less, the rate of change will depend on the development of capacity of the communities to manage the resources.

5.1.2 Forest Resources

Forests and woodlands cover nearly 60 percent of the total land in Zambia and these are rich in biodiversity. The conservation and management of forests includes 7.4 million hectares of forest resources under the Department of Forestry, an addition of 15.6 million hectares in GMAs and 6.4 million hectares in national parks, which are under the responsibility of Zambia Wildlife Authority. The remaining wooded area is under traditional authority. These forests and woodlands are generally dominated by the Miombo, *Brachystegia* in the plateau area, Mopane, *Colophospermum mopane* and Munga, *Acacia* woodlands in the valley regions of the country, and these forests range from Evergreen, deciduous forests to open woodland.

Forests contribute to the national economy through the provision of wood products, food products such as fruits and various tubers, energy supply and through the protection and conservation of water catchments. While forests are a good source of medicines, they provide good habitats for most wildlife species.

Information from a 1994/95 survey showed considerable reliance of Zambian communities on forests. The results indicated that 3.5 million m³ were commercially exploited as timber mainly Mukwa, *Pterocarpus angolensis*, and Teak, *Baikiea plurijuga*. Charcoal and fuel wood accounted for 94 percent or 14.2 million m³ of total energy used, and 88 million m³ were used for industrial purposes. Zambia now has 2.2 billion m³ of commercial value timber and 1.3 billion m³ of less commercial value standing volume.

Fuel wood production is the largest forest industry. Whereas forest products may be easily available at present to consumers, it is important that these resources are used on sustainable basis. As planning and management are inadequate, forest resources are largely being over-exploited and in some areas they have completely disappeared. Perhaps this is attributed to the lack of perception of the exact forest values in Zambia.

Currently, indicators of forest contribution to the national economy are estimated at only 0.9 percent of GDP. This is of course a serious underestimation as most users of forests are in the informal sector. Forest uses through wood fuel and charcoal production and forest products such as fruits, fibre, construction materials, mushrooms are not accounted for.

Threats to Forests

Unfortunately, forests are severely threatened through over-exploitation and excessive removal of vegetation. Deforestation is estimated at 300,000 ha per year (GRZ, 1999),

and has reached a critical stage as a result of uncontrolled settlements, illegal logging, clearing for agricultural purposes, forest fires and charcoal production. Areas most affected are peri-urban and areas along major roads where demand for fuel wood is very high. Nearly all provinces in Zambia are severely threatened with deforestation.

Deforestation leads to land degradation and contributes significantly to soil erosion and siltation. It has severe impact on other natural resources such as wildlife, water and fisheries, and increases risk of floods.

Institutional Arrangements

Forest resources are managed through the Forest Department, which is located in the Ministry of Tourism, Environment and Natural Resources. Forest resources are also indirectly managed through National Parks and Game Management Areas. There is no clear indication of management of forests located in traditional lands, although in areas like the Western Province, the Royal Establishment has some authority on these resources.

In 1998, the Forest Department put in place a National Forest Policy which is intended to ensure sustainable flow of wood and non wood forest products and services while at the same time ensuring protection and maintenance of biodiversity for the benefit of the present and future generation through the active participation of all stakeholders. Specific goals are:

- To put in place effective forest management systems and operating structures.
- To formulate and implement appropriate forest policies and programmes for sustainable management and use of forest resources.
- To promote sustainable, participatory management and use of forest such that all stakeholders, men, women and children take active and sustained interest towards effective conservation, production, management and utilisation of the nation's forests assets.

Of most significance in the policy objectives is the emphasis on the participatory approach leading to community-based natural resources management, as this is an important reform in the effective management of forest resources. Nevertheless, although the Forest Department was recently restructured to improve efficiency in its operations, it still remains exceedingly weak and struggles to meet the minimum requirements in human resources and funding to implement the legislation and the National Forest Policy effectively. Although the Forest Act of 1999 has not been put in place, provisions to implement CBNRM are clearly outlined in the policy framework, and certainly, the future of forest resources depends on public participation and recognition of forest values.

5.1.3 Water Resources

Zambia is among the few countries in Africa endowed with sufficient water resources to meet present and expected longer-term demands. Zambia surface water resources comprising lakes, swamps and rivers cover approximately 45,000km². Ground water capacity is estimated at 1.740m³. Water demand is growing as population continues to expand.

The total run off is of the order of 4000 cubic meters. This is less in the southern part of Zambia due to limited rainfall of less than 800 mm/year. The picture is clear for the river basin perspective.

Table 5.2: Area and Run Off of Major River Basins

River Basin	Basin Area (Hectares in Zambia)	Mean Annual Run Off M³/s
Zambezi	261,000	1,900
Kafue	152,000	350
Luangwa	165,000	500
Luapula	124,000	690
Chambeshi	34,000	230

Water stored in the major lakes is not fully quantified but substantial. The major reservoirs are the Lake Kariba, Lake Tanganyika, Lake Mweru, Lake Bangweulu and Lake Itetzi-tetzi. Regional water resources have not been fully known but has been estimated at 1,740, 800 MCM, and ground water recharge has been estimated at 160,080 MCM/yr. (JICA, 1995).

According to the records of the Department of Water Affairs (Chipungu et al., 1993) there are at present 3,945 deep wells with depth ranging from 20 to 80 meters and 5,537 shallow wells of depths less than 10 meters.

Another source of ground water is from the mines, and as indicated in the table below, this is quite substantial. This water usually finds its way in the local streams to supply the environment.

Table 5.3: Discharge of Mines

Name of Mine	Dewatering Discharge
Mufulira	80,000 m ³ /day
Chibuluma	45,000 m ³ /day
Luanshya	55,000 m ³ /day
Chingola	88,700 m ³ /day
Konkola	365,000 m ³ /day

Major Water Uses

Water resources are used in many ways:

- Domestic water supply: The domestic water supply in Zambia has been estimated at 200-400 liters per person in urban areas and 15 liters in rural areas (NEAP, 1994) and less than 33% of rural people have access to clean drinking water.
- Industrial and mining uses. The exact values for water uses in the industries are not known, however, in the Kafue region where this has been estimated, water abstraction for industrial purposes account for 4.44m³/s.
- Hydro power operations. Water is used for hydropower generation in Zambia, Kariba (1200MW), Kafue (900MW), Victoria Falls (108MW). Electricity is required for industrial and domestic uses.
- Irrigation. The current irrigation potential in Zambia is very high although this has not been explored. Currently irrigation developments at commercial scale are confined to Kafue flats, Lower Zambezi and Luapula. However, irrigation is practiced at small scale in wetlands in Western and Eastern provinces in the flood plain and in the dambo wetlands, respectively.
- Transportation and tourism. Water is a medium for transportation for communities living along rivers and lakes and this attribute is important in the Kariba, Lake Tanganyika, Lakes Mweru and Bangweulu, and in Western Province. Whereas recreation is not developed, wetlands provide excellent areas for tourism development.
- Nature and environment. Water is needed to sustain ecosystems, in particular wetlands ecosystems. The interaction of wetlands and water are clearly understood in the manner ecosystems and function. Aquatic species such as fish, birds, reptiles, mammals and plants depend on water development and function.

Threats to Water Resources

Whereas water quality issues are only attributed to lack of infrastructure for water supply, conflicting water demands have emerged in some areas with degraded environment such as in Southern Province due to deforestation and dam developments. Furthermore, access to clean water has been limited by declining water quality due to industrial pollution and excessive vegetation removal are factors, for example the case of lower Kafue River where the river is highly eutrophic, this has led to spread of aquatic weeds mainly water hyacinth. Secondly, water quality has also declined due to deforestation as siltation and sedimentation are serious result of excessive removal of vegetation.

Similarly, wetlands which are important sources of water resources are equally being threatened by over exploration, sedimentation and pollution.

Institutional Arrangements

In the PRSP the overall objective for the Water Sector is to ensure that Zambia's water resources are effectively developed to contribute to poverty reduction through increased access to safe water and sanitation and food security for low-income rural and urban

people. The portfolio for water resources management is in the Department of Water Affairs, Ministry of Energy and Water Development (MEWD). The Department of Water Affairs has a big task to manage water resources in the country, although the supply function has been transferred to the councils, in the Ministry of Local Government and Housing. The Department of Water Affairs works with the Water Development Board, which is directly responsible for allocation of water rights.

The major shift in sector reform was seen in 1994 when the National Water Policy was adopted following a consultative process spearheaded by the MEWD. While the policy covers issues of water resources management, water use and water quality aspects, its main objective is to *“Promote sustainable water resources development with a view to facilitate an equitable provision of adequate quantity and quality of water for all competing groups of users at acceptable costs and ensuring security of supply under varying conditions.”*

The policy framework includes the following key policy strategies:

- Recognizing the important role of the water sector in the overall socio-economic development of the country.
- Vesting control of water resources in the country under state control.
- Promoting water resources development through an integrated management approach.
- Providing adequate, safe, and cost-effective water supply and sanitation services with due regard to environmental protection.
- Defining clear institutional responsibilities of all stakeholders in the water sector for effective management and coordination.
- Recognizing water as an economic good.

Within this policy framework, Government successfully implemented a broad-based, collaborative, and consultative approach to elaborate strategies sufficiently specific to different sub-sectors with respect to water supply and sanitation. The existing water supply and sanitation (WSS) sector strategies include Strategy and Institutional Framework for the Water and Sanitation Sector, Environmental Sanitation Strategy, Peri-Urban Water Supply and Sanitation Strategy (within targets urban low income communities), and the Community Water Supply and Sanitation Strategy (targeting rural areas). The Community Water Supply and Sanitation Strategy is not yet formally adopted. The strategies and institutional arrangements for WSS service provision to urban areas, in particular, are elaborated in the Strategy and Institutional Framework for the Water and Sanitation Sector adopted in 1994. It establishes the framework for devolution of authority for service provision from Central Government to local authorities and private enterprises, and it has so far been the basis of the ongoing institutional reform of the WSS sector.

The current legal arrangement for the development and management of water resources in Zambia is presented by the following pieces of legislation:

- The *Water Act, Cap. 198* (originally enacted in 1949). This is the main statute dealing with ownership, allocation and regulation of the nation's water resources. The act deals mainly with surface water and does not regulate groundwater, or those portions of rivers, such as the Zambezi, which constitute international boundaries. The Water Act establishes the Water Board as the organizational unit responsible for administering water rights in the country. The Department of Water Affairs (DWA) in the Ministry of Energy and Water Development provides technical support to the Water Board. DWA is responsible for water resources planning and management.
- The *Water Supply and Sanitation Act No. 28 of 1997*. This specifies that institutional responsibilities for provision of water supply and sanitation services lies with local authorities, and establishes the National Water Supply and Sanitation Council as the regulator of the water supply and sanitation sector. Local authorities may provide services by themselves or through commercial utilities licensed and regulated.
- *Environmental Protection and Pollution Control Act, Cap, 204*, which is primarily concerned with control of water pollution.
- *Zambezi River Authority Act (1986)* which is concerned with management of the water resources in the main stem of the Zambezi River for shared power generation at Kariba for Zambia and Zimbabwe.

Following the Water Resources Master Plan of 1995, the Government put in place a Water Resources Action Programme (WRAP). The implementation of this programme effectively commenced in the second half of 2001 and through WRAP, the Government is addressing the elaboration of strategies for water resources management. The overall goal of WRAP is to contribute to reduction of poverty, increased food security, and enhanced social and economic development by establishing a comprehensive framework that will promote effective development and management of the nation's water resources in an equitable and sustainable manner with strong stakeholder participation. The main objective of WRAP is "*Zambia's water resources (surface and ground water) being managed and utilized for maximum economic benefit in an equitable and sustainable manner with strong stakeholder participation*".

Deriving from the above, WRAP has seven strategic objectives, namely:

- (i) Effective institutional and legal framework for water resources management established and functioning.
- (ii) An operational and sustainable data management information system established, which effectively supports water resources planning, management and development.

- (iii) Enhancing institutional performance including human resources competence, capacity and motivation to develop and sustain efficient water management and improved awareness raising.
- (iv) The technical aspects of water resource allocation practices, conservation and infrastructure development activities improved.
- (v) The economic value of water integrated into decision-making process for water resources management and development.
- (vi) Environmental values and considerations properly integrated into water resources management and development.
- (vii) Strengthened domestic capacity to manage and negotiate international water sharing issues.

Furthermore, through WRAP, a pilot programme has been put in place to manage water resources in the Kafue river basin, and the water management scheme for Kafue flats sub-catchment is nearly completed, and pilot projection on the upper catchment of the Kafue basin is also under implementation.

5.1.4 Institutional Relationship Between the Ministry of Tourism, Environment and Natural Resources and Other Public Institutions and Traditional Institutions

The relationship of the Ministry of Tourism, Environment and Natural Resources to other public and traditional institutions and authorities is complicated. This relationship can be viewed at several levels:

- Legal and institutional level, in which pieces of legislation either complement of are in conflict.
- Functional and activity level, where in process of carrying out their functions, institutions may conflict each other. The relationship is summarized in Table 5.1.4.

Table 5.4: Important Ministry of Tourism, Environment and Natural Resources Institutional Relations

Ministry/Institution	Positive projects, programmes where linkages are required	Areas of conflicts and requiring positive interaction
Agriculture and Cooperatives	<ul style="list-style-type: none"> • Conservation farming • Land sue plans • Agro forestry • Fisheries management 	<ul style="list-style-type: none"> • Settlement schemes • Irrigation projects • Deforestation • Agro chemicals • Pest control
Energy and Water Development	<ul style="list-style-type: none"> • Water harvesting • Water resources action plan 	<ul style="list-style-type: none"> • Legislation needs reform to cover CBNRM especially in

	<ul style="list-style-type: none"> • Water resources master plan • Integrated water management strategy for Kafue flats 	wetlands management and water catchment management
Ministry of Mines		<ul style="list-style-type: none"> • Legislation on environmental control should be enforced issues of abandoned mines, pollution waste disposal
Ministry of Local Government & Housing (District, Councils, Chiefs)	CBNRM – in some GMAs and forestry areas	<ul style="list-style-type: none"> • Illegal settlement in protected areas • Settlement schemes require EIA • Planning • Legislation need to be harmonized
University of Zambia, CBU and NRDC	Appropriate courses in environment, legal, sociology, biological and ecological bias	<ul style="list-style-type: none"> • Course and programmes need to be introduced on expanded fields such as natural resources management
Ministry of Tourism, Environment and Natural Resources	<ul style="list-style-type: none"> • Wildlife management through ZAWA • Forest management • Anti-pollution control • Environmental Impact Assessment • CBNRM in wildlife, forest resources 	<ul style="list-style-type: none"> • Planning • Legislation requires harmonization with other pieces of legislation to improve coordination
Ministry of lands	Land control and appropriation	<ul style="list-style-type: none"> • Need for legislation to be harmonized with other pieces of legislations on land use

5.2 Current GRZ, USAID and Other Donor Efforts

The GRZ, USAID, and other donors have been supporting the development of the natural resources sector in varied ways, in some instances for a very long time. USAID's efforts focus more on the importance of income generation compared to most other donors.

5.2.1 Government of the Republic of Zambia

The GRZ has made considerable strides in providing a good environment for the management of natural resources. Government response in carrying out intervention measures have been specifically in the following areas:

- Restructuring of Government institutions to streamline management of natural resources. All ministries dealing with natural resources have been restructured.
- Legal and policy framework. The following policies have been developed and are in place: Policy for National Parks and Wildlife in Zambia which greatly focuses on CBNRM; the Forest Policy which has a provision for CBNRM; and the Water Policy which guides how water should be exploited in the country.

Whereas there is still work to be with the policy framework, the Government has made it possible to provide adequate legislation to support various initiatives in the management of natural resources. The Zambia Wildlife Act of 1998 has provided for CBNRM in the management of wildlife. The Fisheries Act and Forest Act are being processed, and have made a provision for CBNRM.

- Capacity Building. It is the desire of the Government to develop manpower in the field of natural resources management. Institutions of higher learning, such as the University of Zambia, Copperbelt University and colleges such as NRDC, continue to train personnel in natural resource management.
- Infrastructural Development. Much of the infrastructure in the protected areas has decayed. It is the desire of the Government to develop infrastructure in these to improve access to the natural resources for effective management.

5.2.2 USAID

According to records and information from interviews held with people, USAID's efforts in this sector have focused on Community Based Natural Resource Management. USAID currently supports three prominent projects:

Community Based Natural Resource Management and Sustainable Agriculture (CONASA). This project is located in the southern part of the Kafue National Park in Mulobezi, Sichiltulo and Bilili GMAs and covers the Southern and Western Provinces. A consortium of NGOs implements the projects, whose main goals are to improve the welfare of people living in the GMAs, and to ensure the sustainability of natural resources for future generations

The project's activities include organizational capacity building, rural agriculture (conservation farming), wildlife management, business management and policy analysis. The project is designed to manage various resources in the areas such that local people are given the opportunity to generate income. The resources include wildlife, agriculture, forests (timber), water.

Cooperative League of the USA – Natural Resources Management Programme (CLUSA-NRM). This project has been running since 1998 in Chipata, Mambwe, Katete and Petauke Districts. Its objectives are:

- To demonstrate in the Zambian context as a pilot activity in the Eastern Province, a sustainable approach to community-based natural resources management that can be extended to other areas of the country and can be continued by other groups/organizations after the CLUSA program is completed.
- To contribute to the effective management and conservation of Zambia's forests and agricultural areas by assisting local community-based groups to acquire the skills needed to develop and generate income from the resources of the forest and agricultural lands in a sustainable way.
- To enable villagers and forest staff to develop comprehensive forest management plans and establish effective multi-village forest management communities.
- To expand the range of income generating opportunities available to the target populations by introducing new agro-forestry practices and new production and processing technologies that add value to primary products.
- To provide alternative income generating opportunities and alternative farming techniques to the rural populations that will relieve pressures to overexploit forest areas.

World Vision International – Agroforestry Project. This project is supported by USAID and it is located in Chipata, Mambwe, Katete, Chadiza and Petauke. It's objectives are to:

- Improve farmer productivity (crop yields per ha) through the introduction and adoption of sustainable agricultural practices.
- Improve farmers' access to agricultural extension and training.
- Develop and increase farmers' access to market information.

The project's major components include:

- Agroforestry Activities: Four fallow species are used by the project, namely: *Sesbania sesban*, *Tephrosia vogelii*, Pigeon peas and *Gliricidia sepium*.
- Crop Diversification.
- Administration: Covering the management and overall coordination/support to the activities of the field-based components.

The status of the USAID projects are summarised in Table 5.5 overleaf and the models are compared to CBNRM - ZAWA and South Luangwa Management Unit (SLAMU).

5.2.3 Other Donors

Table 5.5 summarizes USAID's projects and also provides a summary of the efforts of the other major donors supporting efforts to improve the management of Zambia's natural resources.

Table 5.5: Donor Activity in Natural Resources

Donor	Focus Area of Assistance	Comments
USAID	<ul style="list-style-type: none"> • CBNRM on wildlife through CONASA in Sichitulo, Mulobezi and Bilili GMAs to organise communities in these areas for generating revenue and development • Water harvesting through CONASA • Conservation farming through CONASA in southern province 	This role has been drastically reduced from their previous commitments of additional areas including Mumbwa GMA. This project has just started in southern province
	Agroforestry through World Vision International in Chipata, Mambwe, Katete, Chadiza and Petauke	Good progress has been registered in participation and areas where this started earlier have shown good results in yield. However it is important to see if the project will be sustainable
	Community forestry through CLUSA-NRMP in Katete, Petauke, Mambwe and Chipata. This project has several components: <ul style="list-style-type: none"> • Forestry • Agriculture • Adult functional literacy/HIV/AIDS • Producer owned trading company 	Very difficult design, but previous evaluations indicate increase in some indicators such as yield. However major limitation is in the control of the squatters in the forest
NORAD	<ul style="list-style-type: none"> • CBNRM through SLAMU in the Lupande GMA, Eastern Province 	<ul style="list-style-type: none"> • Has been funding the project for nearly 20 years, and the project is considered the most successful in CBNRM in Zambia.
	<ul style="list-style-type: none"> • ZAWA institutional reforms (done together with EU) 	<ul style="list-style-type: none"> • This project was completed
	<ul style="list-style-type: none"> • Considering expanding the programme to other areas such as Kafue National Park block • ZAWA directly on uniforms and equipment for natural resource protection 	<ul style="list-style-type: none"> • Has been supporting ZAWA through restructuring
	<ul style="list-style-type: none"> • WRAP in Department of Water Affairs Fisheries Department on Kariba Fisheries research 	<ul style="list-style-type: none"> • The project ended in 2001
	<ul style="list-style-type: none"> • Zambezi River Action Plan together with EU 	

FINNIDA	Implementation of ZFAP and PFAP in the Department of Forestry	The project is in progress
UNDP	<ul style="list-style-type: none"> • ESP in the Ministry of Tourism, Environment and Natural Resources (MTENR) 	This was completed
	<ul style="list-style-type: none"> • ZFAP in the Department of Forestry 	Completed
	<ul style="list-style-type: none"> • Developing Environmental Policy in the MTENR 	This is in progress
	<ul style="list-style-type: none"> • Aquaculture in Central, North-Western and Northern Provinces 	This has been completed
	<ul style="list-style-type: none"> • Domestication of environmental conventions 	This is in progress
	<ul style="list-style-type: none"> • Capacity building in area of environment in 10 districts supporting CBNRM in Mumbwa, Mufulira, Kasempa, Mpika 	This project ended in 2001
WORLD BANK	Tourism infrastructure in Livingstone and Kafue National Park area	This project is being developed and has not been established
	ECZ on legal reforms	
EU	<ul style="list-style-type: none"> • ECZ in EIA • ZAWA in Institutional Reform 	This project was completed
JICA	<ul style="list-style-type: none"> • Development of Water Resources Master Plan • Fisheries Development at Mwekera Research in Aquaculture • Capacity building in ZAWA • Communication equipment in ZAWA 	
DANIDA	<ul style="list-style-type: none"> • CBNRM in Mumbwa 	
	<ul style="list-style-type: none"> • CBNRM in Bangweulu 	<ul style="list-style-type: none"> • This ended in 1998
	<ul style="list-style-type: none"> • CBNRM in Lower Zambezi 	
	<ul style="list-style-type: none"> • IWM in the upper Kafue Basin sub-catchment 	
NETHERLANDS	<ul style="list-style-type: none"> • Environmental Auditing in ECZ • Fisheries Co Management through SNV in Luapula and Bangweulu 	<ul style="list-style-type: none"> • This project ended • This project has been reformulated

CIDA	<ul style="list-style-type: none"> • ECZ on water quality study in Kafue River • Monitoring of ground water • Environmental emergency response system 	This assistance has since been terminated
WWF	<ul style="list-style-type: none"> • ECZ in the development of wetlands policy, and wetlands conservation programme 	<ul style="list-style-type: none"> • This project has since been completed
	<ul style="list-style-type: none"> • Wetlands project in Kafue Flats in the MTENR 	<ul style="list-style-type: none"> • This programme is focusing on water management, rehabilitation of wetlands and development of infrastructure for tourism
	<ul style="list-style-type: none"> • Development IWM strategy for lower Kafue catchment 	

5.3 Lessons Learned

Current understanding of wildlife and forest resources has evolved from several perspectives. First, while the traditional view has been for complete preservation of wildlife through the creation of national parks, this thinking has greatly changed as wildlife is now used to contribute directly to the economic growth of the country. Second, there is realization that unless local communities are involved in the conservation of wildlife, conservation will not succeed. Participation of communities living side by side with wildlife in the management of the resources is essential, because these communities are part of the problem, and it is important that they are part of the solution. Third, all proceeds accruing from the exploitation of wildlife resources are shared between the Government and local communities. This sharing mechanism demands that 40 percent of the proceeds are given for management of the GMA, 35 percent is retained by the community and 25 percent is retained by ZAWA. In principle, communities use this money to carry out their social programmes such as road maintenance, building of schools and clinics.

5.3.1 Income-Earning Opportunities

Much of the rural population in Zambia relies heavily on natural resources for subsistence. This is through agriculture and harvesting wildlife and forest products. However, the exploitation of these resources varies considerably with the levels of poverty, capacity of communities and the enabling environment for marketing. Communities living around protected areas are poor and vulnerable, and their main source of income is the bush. These products are largely produced at subsistence level, but in the presence of marketing, the trend has been to convert these products into cash. Today nearly every bush product can be exchanged for cash.

Opportunities that provide income-generating activities include the following:

Direct ways

- Sale of forest products such as fruits, fibres, reeds, grass, wood, charcoal, timber, mushrooms, honey.
- Sale of wildlife products such as meat, hides, teeth and horns.
- Sale of agricultural products.

Indirect ways

- The development of tourism and safari industries produce a great opportunity for communities to generate funds, and this is possible through creation of employment as workers in hotels, lodges, safari camps, and as trackers or guards.
- Communities sell handcrafts and curios, as well as make money by entertainment through traditional dances.

- Communities have been able to make safari or tourist camps and compete favourably with large operators. Examples of this include projects in Luangwa and at Chikuni in the Bangweulu swamps.
- Communities are able to generate income through hunting safaris. The mechanism to do so is in place, i. e., local communities have access to the proceeds accruing from safari licenses and hunting fees. This provision is now enshrined in the Wildlife Act of 1998, and it is provided for in the current forest policy.

Table 5.7 overleaf summarizes income-earning activities through natural resource management currently in evidence in Zambia. These include: employment through hunting safaris, employment through eco-tourism, eco-tourism ventures, share of proceeds from licenses and hunting fees, timber harvesting, and bee-keeping. These are very important opportunities in rural areas as sources of income are extremely limited.

It is well established that co-management or cooperative management -- now called Community-based Natural Resources Management, or CBNRM -- is in essence a way forward in the management of natural resources in Zambia. Communities that live around protected areas are in every way partners in the conservation of the resources for several following reasons. They live side by side with the resources and have a considerable advantage in knowledge about them. Communities in this case are custodian of the area, and as such should play an important role in resource management.

The policy on national parks and wildlife in Zambia and the Wildlife Act of 1998 provide a framework in which local communities are allowed to share benefits and responsibilities in the management of wildlife. Both the Government and communities are driven towards co-management by a number of incentives, and although the list is not exhaustive, among them are given in Table 5.6

Table 5.6: Incentives for Participating in the CBNRM System

Government Incentives	Communities Incentives
<ul style="list-style-type: none"> • Centralized management has not been able to solve resources crises situation. • Over exploitation of the resources. • Poor levels of compliance with regulation. • High cost resource monitoring, control and enforcement. • Donors promoting community participation. • Avoidance of conflicts among resource users. 	<ul style="list-style-type: none"> • Depletion of resources. • Poor living conditions of communities. • Lack of representation in the management. • decision making process of the resource, • thus gain political leverage. • Lack of access rights. • Meeting local needs means empowering the local communities since they gain increased control of the resources. • Enhanced motivation to conserve natural resources. • Improved economic and fare and livelihood security in the area.

Table 5.7 Income Earning Opportunities Being Pursued By Community Groups Living Near Protected Wildlife Areas

Activity	Description	Attractiveness or comparative advantage	Disadvantage
Employment through hunting salaries	Local communities are employed as skimmers, carriers, cooks, waiters, guides traders.	<ul style="list-style-type: none"> Local people have good knowledge of animals, bush and the area. Availability. Inexpensive labor. Incomes are retained within the area. Seasonality allows individuals to do other things. 	<ul style="list-style-type: none"> It is seasonal. Employers may bring workers from outside the area. No policy in place to protect local. Labor.
Employment in Eco-tourism	Local people are employed as cooks, cleaners, camp attendants, drivers, general workers.		Employers may bring people in from outside
Eco-tourism Business	<ul style="list-style-type: none"> Local communities are venturing in management of tourist camps. Sale of curios and other handcrafts such as baskets, hats, earrings. Traditional dances and similar activities 	<ul style="list-style-type: none"> Willingness to conduct business as a community. Materials readily available. Communities have considerable interests and have strong culture. 	<ul style="list-style-type: none"> Limited capacity informs of hunting and skills. Promotion of markets. Communities are not organized. Communities not cohesive.
Share of proceeds from Safari hunting business	The NPW Act allows communities in a specified area to access money accruing through hunting concessions of 35%.	<ul style="list-style-type: none"> Proceeds are fairly substantial and communities have a wide range of programmes which should be supported. Proceeds serve as compensatory measure for loss of land. Proceeds serve as participatory reward and resource ownership. 	<ul style="list-style-type: none"> Lack of transparency and corruption Limited capacity to finances. Communities not well organized. Lack of Government commitment. Adverse and inconsistent policies. GRZ continues to have larger share of 65%. Licensing is done by GRZ.
Sale of Licenses	Licenses are permits sold include safari licenses, game licenses, supplementary licenses, bird licenses, entry fees, hunting permits.	Money accruing from the sale of licenses is substantial and share of such proceeds could proved good money for community programmes.	These licenses are sold by GRZ as policies do not exist which could allow communities to sell licenses applicable to their own areas.
Bee keeping and Honey collection	Communities make bee hives in the forests.	Honey fetches good money.	<ul style="list-style-type: none"> It must be properly organized. Need to locate markets.
Timber harvesting	This may include timber cutting, pit sowing. Species harvested are Pterocarpus angokensis (Mukwa).	Timber fetches good money.	Licensing process is tedious. Policies are not in place to allow countries to have concessions.

CBNRM benefits include sharing revenues according to the following formula:

- 40 percent to support wildlife management activities.
- 35 percent as discretionary travel to local communities.
- 25 percent to ZAWA to support administration.

Local communities use this money to carry out social programs within their areas. However, CBNRM for the most part is faced with limitations that should be considered. Key limitations relate to community participation and Government commitment. The parameters of each are briefly summarized below.

Community Participation.

This is a condition by which local knowledge, skills, and resources can be mobilized and fully employed. People participate when they take an active role in planning, deciding and implementing and evaluation activities. A clear indicator of success could be the development and strengthening of local institutional structure, which will represent peoples' interests and concerns long after a specific initiative ceases to exist. As stated earlier, the local participation approach to management of natural resources is greatly advantageous to the Government, communities and natural resources conservation. Nevertheless, community participation has its own limitations, and some of these may include the following:

- Community authority structures. Local communities are hierarchical in nature and generally follow decisions of their leaders. In such communities, participation of local people may clash with local customs, interests and priorities. Issues of illegal settlement, poaching, deforestation and governance should be added in the context of the local situation, otherwise the project may remain alien to the community.
- Project identity and ownership. Whereas there is a general rule that projects assume a bottom-up approach in their initiatives, in practice, this is not the case. For the most part, projects start with the involvement of higher Government authorities, which eventually impose their ideas on rural communities. Ideally, facilitators are expected to work with people at grass roots, and then move upward, as doing so, community felt needs are identified. This does not mean ignoring mandated institutions, but trying to create a project identity.
- Lack of capacity of the institutions involved. Basically, most local institutions have no capacity to absorb project concepts and inputs from outside. Equity sharing of benefits and responsibilities depends on the level of capacity. Clearly communities need to be trained for the new ideas; conservation issues, resources management, revenue generation, administration and financial management.
- Paucity of Resources. Participatory processes may require certain investments of time and resources. These resources may not be available.

- Accountability and Transparency. Lack of accountability and transparency is common in projects during their initial stages, and should be viewed with concern.
- Community empowerment. Whereas individuals may claim that the process is a bottom-up approach, this is not really correct as the Government still prepares plans and implements them. It is obvious that projects are designed to assist poor people who are not partners in the management of the planning and decision making process. Local people always will treat the project as an imposition or a poverty relief effort from the Government.

Government Commitment

Although the Government has made progress in the policy and legal reforms, implementation of these changes has been a matter of great concern. Clearly Government's lack of commitment as demonstrated through inconsistencies provides a serious risk to the project. For example, the recent ban on hunting is a bad indication of Government lack of commitment, as the process of policy change does not include community input. Communities have not only lost revenue from hunting operations, but have also lost confidence in the programme.

5.3.2 Implementation of Donor Programmes

Table 5.8 compares and contrasts different approaches to promote sound natural resources management in Zambia today.

Table 5.8: Features of Various CBNRM Models

Name/ Model	Resource Base	Source Of Capital / Income	Model Activities	Known Methods Of Sharing Benefits	Comments / Limitations
CBNRM – ZAWA	Wildlife	<ul style="list-style-type: none"> • GRZ, Resource Bonds • Wildlife harvesting • Tourism 	<ul style="list-style-type: none"> • Wildlife management, protection and conservation 	<ul style="list-style-type: none"> • 40% GMA Management • 35% returned by community • 25% retained by ZAWA 	<ul style="list-style-type: none"> • Model focuses only on wildlife • Model completely under funded initially • Capacity of communities to participate very inadequate
CBNRM – CONASA	Wildlife Forest Agriculture Water	<ul style="list-style-type: none"> • Donor input including technical assistance and commodity AID. • Wildlife harvesting • Agriculture produce forest products 	<ul style="list-style-type: none"> • Wildlife management • Conservation farming • Water harvesting • Forest management • HIV / AIDS campaign 	<ul style="list-style-type: none"> • Based on ZAWA system on wildlife 	<ul style="list-style-type: none"> • This project is largely donor driven • Communities not yet fully structured • Excessive planning
CBNRM – SLAMU	Wildlife	<ul style="list-style-type: none"> • Donor assistance including technical assistance • Wildlife harvesting • Calling of hippo • Tourism 	<ul style="list-style-type: none"> • Wildlife management 	<ul style="list-style-type: none"> • 100% from hunting back to the community • 100% from National Parks goes back to community • 50% from hippo harvesting goes to community 	<ul style="list-style-type: none"> • The project is largely donor driven • Lack of transparency • Lack of capacity of communities involved • Communities depending on aid

CBNRM – CLUSA (NRM)	Forest Products Agriculture	<ul style="list-style-type: none"> • Credits • Grants • Technical assistance 	<ul style="list-style-type: none"> • Farming • Forest conservation • Adult functional literacy / HIV/AIDS • POTC 	<ul style="list-style-type: none"> • Not defined 	<ul style="list-style-type: none"> • Communities not yet organised • Policy and institutional weakness in the Department of Forestry
World Vision International Agroforestry	Agriculture	<ul style="list-style-type: none"> • Grants • Loans / credits • Technical assistance 	<ul style="list-style-type: none"> • Farming 	<ul style="list-style-type: none"> • Not applicable 	<ul style="list-style-type: none"> • Availability of credit facilities • Lack of marketing • Training and extension workers are lacking

Among the lessons learned in implementing donor programmes such as those listed in Table 5.8 are the following:

At the Design Level.

The project designs are for the most part donor driven. Difficulties and delays occur requiring adjustment of the legal and institutional framework within which the project is to be embedded. Secondly, both geographical location and timing of the project may not necessarily aim at answering the problem as it is locally defined. As a result it may not address the local community's primary concerns. Thirdly, one aspect that has not been seriously considered is adaptive project design. In the areas where there are too many assumptions, a safe project design is to incorporate a principle of adaptive management. Fourthly, local communities may be structured for the project and as such will require sufficient time in organising communities.

Most projects are faced with very large geographical areas and may be conceptually involved. In such a case, this may deny the project the concentration and focus needed. Most critics have maintained that the control of large projects is often lost during implementation. The preferred approach demands a narrow focus for the following reasons:

- The project will be able to penetrate the area and establish concepts at the core of the community; and
- Since the project concept is generally new, and since project need local participation, it is unrealistic to begin the project with too many activities and too much Government involvement, as the potential for confusion and misunderstanding of ideas can be quite considerable.

Therefore, the approach is to bring project concepts within reach of communities and to limit project boundaries within which concepts can easily be manipulated.

At the Implementation Level.

A number of assumptions have come into play. Primarily the project expects Government commitment and political will. Positive change of policies is a good thing, however a ban on hunting, for example, leads to a big loss in revenue generation. As revenue collection is part of CBNRM, the Government policy on stopping hunting was a clear demonstration of lack of commitment on the part of the Government.

Several other issues have emerged during project implementation

- Lack of capacity of both the Government and traditional institutions. This often leads to misunderstanding and failure to implement certain components of the project.
- Donors expect quick results, but from this survey it was clear that at least a minimum of three years could be required before results could really seen.

- Donor aid is often too rigid and lacks flexibility during the implementation process
- Donor shift of the policy has led to termination of projects

Sustainability.

This refers to three levels: a) stewardship, b) resource resilience, c) project self-maintenance. Stewardship refers to the tendency for resource users to maintain productivity of the resources. All three should be built in the project design to obtain continuity of project continuity. Unfortunately, the tragedy in projects is that they cannot stand on their own soon after donor assistance has ceased. This obviously is attributed to failure or limited focus on the development of institutional structure and financial mechanisms for the project to be self-sustaining.

5.4 Moving Forward: Opportunities and Constraints

This final section on the natural resources sector identifies opportunities for future Government, private sector and donor involvement along two different, but related dimensions. It first identifies opportunities by type of activity, more specifically potential income-earning activity. It also identifies areas of opportunity geographically.

5.4.1 Income-Earning Opportunities

It is important to state that local communities can generate more income when they are organised effectively, more especially if marketing structures were favorable. Potential areas for generating income are:

- Development of more organised beehive industry.
- Production of timber, which is currently not organized.
- Bush meat production, which at present is not organized.
- Land lease to those who want to farm or carry out business on their communal land.
- Imposing a fee on mining of sand, gravel and other raw materials used for construction.

5.4.2 Geographic Focus for Future Natural Resource Sector Development

The Kafue Flats and Bangweulu Swamps are two specific locations that should receive significant attention for natural resources development activities in the future. These are wetland areas and offer significant potential for income generating activities based on tourism and wildlife development. Both areas were included in the ADMADE Program, which was previously under NPWS before it was transferred into ZAWA.

In addition, the assessment team concludes the work of reforming ZAWA remains unfinished and that there is an opportunity to use donor resources wisely to complete this process so that ZAWA can function stably. It is the team's opinion that the restructuring efforts to date have not been effective, and that as a result ZAWA is not fully capable of carrying out its basic operations. This endangers the country's natural resources sector.

A set of constraints will challenge interventions in these areas, as summarized in Table 5.9.

Table 5.9: Natural Resource Sector Opportunities and Constraints By Location

<u>Opportunities by Location</u>	Constraints
<ul style="list-style-type: none"> • CBNRM Kafue flats • CBNRM Bangweulu Swamps • Stabilization of ZAWA • Infrastructure development • Capacity building • CBNRM KNP • CBNRM Katete 	<ul style="list-style-type: none"> • Lack of political will and Government commitment • Lack of transparency • Corruption and mismanagement • Institutional weaknesses (Limited human resources), Lack of motivation • Sectoral approach and lack of linkages • Sectoral approach and lack of linkages • Poor infrastructure in potential areas • Poor funding base

CHAPTER 6: OPTIONS FOR DONOR CONSIDERATION: ALTERNATIVES TO PROMOTE ECONOMIC GROWTH

The purpose of this chapter is to put the sectoral analyses presented in the previous chapters into perspective. It begins with a summary of the priority areas for donor intervention in private sector, agriculture and natural resources development. It provides a summary of the activities currently in progress and those that are in the respective agencies' planning pipelines. The last section offers an analysis of where USAID's future activities to promote economic growth should focus to best complement and leverage the efforts of other stakeholders in Zambia's development

6.1 Priorities for Donor Support

Based on the data and analyses presented in Chapters 3, 4 and 5, the assessment team concluded that to best meet Zambia's current needs and address the most critical constraints, donor support for private sector, agricultural and natural resources development should focus on the following priorities.

6.1.1 Private Sector Priorities

Several themes drive the overall private sector development. One is diversification of the country's product line. Another is the growing emphasis on export-led growth, taking advantage of opportunities in the regional market as well as Europe and the U.S. However, there are critical constraints that must be overcome to do this. To accelerate the growth of private sector development in Zambia, donors should focus their efforts on the following:

- Capacity building: especially for policy design, implementation and monitoring. This is applicable to both the public and private sectors.
- Infrastructure development: especially rural electrification, transportation, and communications and information technology.
- Helping private sector industries diversify their product lines and expand marketing reach. Gemstones offer the potential to diversify the mining industry's contribution to the economy. Value-added agribusiness is also important here.
- Financial institution development across the industry, paying particular attention to improving the flow of capital to micro-, small- and medium-sized enterprises.

Representative of the specific types of activities that the donors should consider supporting are the following:

Public-private sector dialogue

There is growing conviction that structured-public-private dialogue is essential for the development of the sector and to the development of appropriate policies and instruments. There is currently no formal basis for dialogue – what takes place happens on an ad-hoc basis or exists by virtue of informal contacts. At the district level, the

extent of dialogue varies from locality to locality depending on local capacities and the interplay of personalities and interests.

Private sector representatives complain that Government does not take the process seriously citing examples of meetings being scheduled and then cancelled, of irregular participation and poor follow-up. For its side, Government criticizes the private sector for not appreciating the constraints. However, MCTI has recently expressed the desire to institutionalize dialogue with the business community, but to do so, recognize their own needs in terms of strengthening capacities for communication, coordination and negotiation.

Policy and regulatory reforms

Several areas of policy and regulatory reform require special attention. These include an overhaul of the current taxation act in order to bring an enabling environment for private sector and revising business registration and licensing procedures to reduce processes that are length and costly. Additional attention to ensuring that no unnecessary legal and regulatory barriers block effective efforts of private sector participation in prevention, care, and support in the HIV/AIDS epidemic is also indicated. A sub-sector approach to analysing the impact of HIV/AIDS on sub-sector competitiveness (e.g., increasing unit labor costs and decreasing investment flows), and increased attention to tax and tariff incentives to promote increased investment in HIV/AIDS prevention and in care of Persons Living with HIV/AIDS (PLWHA), should also be considered.

Infrastructure development

The weaknesses in Zambia's physical infrastructure are well known. As a result, the PRSP outlines a plan for significant investment to improve the country's ground transportation systems, extend the reach of the electrical grid, and upgrade its communication and information technologies.

Support for the development of the gemstone mining sector

A need to introduce new policy reform and regulatory framework for the industry in order to assist harmonization of its operation and introduction of new marketing methods for the purpose of elimination of unnecessary intermediaries who have taken advantage of the gemstone marketing situation. Government's effort to re-introduce the Gemstone Exchange Scheme should be supported. The scheme will not only serve as forum for the producers and buyers of rough and processed gemstones and jewelry to conduct auctions and routine transactions but will also encourage the participation of traceable gemstone trading and marketing companies rather than individuals in order to promote transparency and accountability.

In addition to the above support, there is need to improve the skills of the gemstone operators in production and marketing information. A study on capacity building should be undertaken.

Support for the export of processed foods, textile and apparel

Export of these agro-processed products to neighboring countries such as Malawi, Zimbabwe, Mauritius, Congo DR, Botswana, Tanzania and South Africa is critical. Support for the export of these products to Germany, Switzerland, U.K, Belgium, Spain, Portugal should also be encouraged. The US market through AGOA is another important market for textile and garment exporters once they have met the visa requirements.

Financial sector reform

As noted earlier in the assessment, the Zambian financial sector is characterized by a number of different types of institutions. However, these institutions do not operate in a coordinated and effective way. Therefore, developing a long-term strategy for the sector should be an important priority.

6.1.2 Agriculture Sector Priorities

The overall theme of diversification extends to agriculture. Zambia has an opportunity to take advantage of its comparative advantages in land and water resources to diversify its agricultural product line to create new income-earning opportunities for smallholders. This diversification also will have a significant impact on food security. To help accelerate the rate at which Zambia develops its agricultural sector, donor-funded efforts should focus on the following priorities:

- Infrastructure – includes roads, rural electricity, and communications.
- Linking smallholders to markets via out-grower schemes and other approaches.
- Expanded use of conservation tillage and conservation farming techniques.
- Improved access to both technical and market information.

Priority crops include: cotton, horticulture and floriculture, dairy, coffee, cassava and organics.

There is a general consensus among the stakeholders that donor support should now be directed at improving household food security, rural incomes and commercialization of the whole agriculture sector. Some of the criteria that might be used to determine priority areas are:

- Relative importance and relevance of intended activities to the livelihoods of the target groups.
- Demonstrable benefits within a short period.
- Numbers of potential beneficiaries.
- Opportunities that will be opened to the beneficiaries.
- Acceptability of the outcomes of the activities by the communities.
- Means available to enable the farmer to benefit from the implementation of the program.

Taking into account the above criteria, the following areas merit consideration for donor support:

Support for Conservation Farming (CF) and Conservation Tillage (CT)

Farmers who have used CF and CT have realized increased yields in maize and other crops and improved soil fertility. This is an immediate benefit to farmers. CF is an appropriate approach in the short- and medium-term as its capital requirements are minimal and therefore suitable to smallholders.

Support for policy development and implementation of appropriate policies

Agricultural development requires an enabling environment, which is created through good policies. There is need for institutional support to generate policies and to build capacity to implement them. This support should be given to MAC, ACF and ZNFU. The farmer benefits from good policies at no direct cost to him.

Capacity building for farmer groups

Farmer groups or cooperatives will become increasingly important in the provision of basic services to farmers. There is need for them to progressively build a capacity to enable them assume responsibility. Leaders of farmer groups can only appreciate their roles through training.

Support to market development programs and linkages

This support is vital as it enables farmers to have a market for their produce. Access to market will accelerate commercialization of the agricultural sector and will promote production of traditional crops and diversification.

Infrastructure

Developed infrastructure is necessary to support services to farmers in marketing and delivery of inputs.

Development of appropriate financial mechanism for agricultural development

As noted above, the financial sector in Zambia is generally weak. This has a special impact on the agricultural sector. There is a need for new mechanisms to facilitate the flow of capital to the sector in general and smallholders in particular. One such promising mechanism is the use of warehouse receipts.

Building capacity in the private sector

Liberalization of the market has opened marketing of inputs and outputs to the private sector. The support requires training in business and financial management skills and ethics. Training of cooperatives in marketing functions will be beneficial to farmers and the cooperative movement as a whole. Attention to the impact of HIV/AIDS on the workforce, and development of appropriate strategies to mitigate and manage the impact, should be an integral part of any capacity building strategy.

Training of private sector extension service providers

It is Government policy to move away from routine extension services. Support to the private sector is needed to build institutional capacity to provide the extension service.

Promotion of on-farm seed production

Programs that are run by NGOs such as Program Against Malnutrition (PAM), Africare and World Vision have been useful in making seed easily available in some rural areas. The area covered, however, is too small compared to the number of rural farmers. The limiting factor on the part of NGOs involved is manpower and financial resources.

6.1.3 Natural Resources Sector Priorities

Zambia's has abundant, but at risk, natural resources, that if better managed could make a significant contribution to efforts to increase incomes and improve the food security of the country's rural population. The priorities for natural resources development include the following:

- Address the problems confronting ZAWA so that the country has the ability to implement a coherent strategy for its wildlife resources.
- Improve efforts to address the critical challenges of over exploitation and degradation of the country's forest resources.
- Build natural resources management capacity at the local level.
- Build natural resources capacity at the institutional level.

Two areas in particular are high priorities for immediate action. One is the Kafue Basin, where the specific concerns encompass wildlife, agro-forestry, and fisheries. The other is Bangwelu, where the specific concerns are the same as for Kafue Basin.

6.2 Donors' Pipeline

There are a large number of donor organizations and international implementing agencies active in Zambia. This section of the report provides a summary of the activities these organizations currently have under way as well as in the planning pipeline that are targeted on private sector, agricultural and natural resources development. This information provides the basis for an analysis of those areas that offer potential to leverage significant impact from limited resources and those areas that offer USAID the best opportunities to cooperate with other organizations.

6.2.1 Summary of Current and Prospective Interventions

The assessment team met with a dozen organizations that are assisting Zambia. The group included six bilateral organizations, three multilateral donor organizations, and two executing agencies. Taken as a whole the group is currently financing a broad range of activities. Many of these organizations are engaged in planning exercises similar in scope to USAID/Zambia's current efforts and are in the process of planning their next cycle of activities.

Table 6.1 is an attempt to summarize current and planned activities that donors are funding to help Zambia develop its private sector, agricultural and natural resources sectors.

Table 6.1: Summary of Current and Planned Donor and International Agency Activities

Donor	Private Sector	Agriculture	Natural Resources
DANIDA			<ul style="list-style-type: none"> • CBNRM in Mumbwa and Bangweulu, Lower Zambezi
DIFD	<ul style="list-style-type: none"> • Support in provision of the following MFIs: Pulse, CETZAM, ZVCF • Transport sector - rehabilitation of Mpulungu harbour • Capacity building strengthening and Technical Assistance 		
E.U.	<ul style="list-style-type: none"> • Provision of financial support to TESF, Small and medium scale enterprises 		
FINNIDA			<ul style="list-style-type: none"> • Implementation of ZFAP
JICA	<ul style="list-style-type: none"> • Road Construction, Technical assistance 	<ul style="list-style-type: none"> • National aquaculture research centre • Luangwa/Chongwe Community Action Plan • Pilot project for rice production in Western Province 	<ul style="list-style-type: none"> • Fisheries Research at Mwekera • Communication equipment in ZAWA
Netherlands		<ul style="list-style-type: none"> • Supporting GART, ACF, ZACA and NRDC/ZEGA 	
NORAD		<ul style="list-style-type: none"> • Supporting farmer associations in Southern, Central and Northwestern Provinces and ACF. 	<ul style="list-style-type: none"> • CBNRM through SLAMU • ZAWA institutional reforms • ZAWA supply of uniforms and equipment • Wrap in Water Affairs
SIDA	<ul style="list-style-type: none"> • MFIs: Currently working with the Association of Micro- 	<ul style="list-style-type: none"> • New, 5-year Agricultural Support Program, which will 	

	finance Institutions (AMIZ); • Mainstreaming HIV/AIDS will be part of its new private sector strategy.	cover Eastern, Southern, Central and Northern Provinces.	
UNDP			Developing environmental policy in MTENR Domestication of environmental conventions
AfDB		• Supports Eastern province Rural Credit Facility	
IBRD		• Agricultural Development Support Program beginning mid-2003	• Development of Tourism infrastructure in Kafue and Mosi-oa-Tunya National Park
IFAD		• Southern Province household food security • Rural Enterprise and Agri-Service Promotion Programme in Copperbelt Province	
FAO		• Supports Smallholder Irrigation and Water Use program • Supports MAC on pilot projects in organic vegetables, and other crops, livestock	
WFP		• Includes CF in some relief programs	
WWF			• Wetlands Project in Kafue Flats

6.2.2 Potential for Impact

Given the extent of the development challenges that confront Zambia, it is important that the resources the donors provide are leveraged to generate the most impact for the least cost. There appear to be a number of areas where this can happen.

Access to capital is generally agreed to be a major constraint to private sector development. However, there is a wide range of on-going and planned donor activities that are addressing problems across the country's financial sector.

In agriculture, there are several on-going activities that have excellent prospects for generating significant results with limited resources. The extended use of conservation farming techniques is one. The director of the Conservation Farming Unit, Mr. Peter Aagaard, has estimated the upper end of the number of households that are capable of employing CF and CT approaches successfully at 250,000. Currently, he estimates that some 40,000 to 60,000 households are using these techniques. So there is considerable room for expansion. Mr. Aagaard has estimated that the Conservation Farming Unit's budget would have to increase from its current level of US\$850,000 to US\$1.5 million. He is confident that he can find and train the personnel to do this.

This is not the only cost of expanding the use of CF and CT. There is the cost of the implementing agencies that will work with local communities to mobilize farmers' groups to receive training, as well as help the members of these groups link to markets. Several organizations, including CARE International, CLUSA, World Vision International and ZATAC are doing this. Other NGOs, for example, Africare are doing similar work with funding from other donors.

Similarly, several donor organizations are providing relatively small amounts of funding for the Zambia Chamber of Small and Medium Business Associations and the Agricultural Consultative Forum.

6.2.3 Potential for Cooperation

The assessment team made a concerted effort in its meetings with bilateral and multilateral donor organizations and international implementing agencies to ask about the extent and effectiveness of current efforts to collaborate and the potential for future cooperation. The results were mixed, but generally positive and optimistic. Some of the impetus to do this comes from the fact that the Poverty Reduction Strategy Paper is an attempt to provide at least a general structure within which donor-funded initiatives should take place. Not surprisingly, many of the areas that seem to offer, if not cry for, donor cooperation are those that offer potential for leverage.

In the agricultural sector, multiple donors are involved in efforts to spread the use of CF and CT. This is an initiative that should continue until it reaches the "saturation" point, which the director of the CFU has estimated at 250,000 smallholder households. Donor coordination to track the dissemination of these techniques and sharing the results of any monitoring and evaluation exercise would be beneficial to all CT and CF stakeholders. However, these functions would be best done outside the CFU, so that it can focus narrowly on technology development and dissemination. The assessment believes that it is reasonable to expect an *ad hoc* Donor's CF/CT Working Group could handle these responsibilities.

6.3 Future Opportunities for USAID/Zambia

In light of Zambia's overall priorities for donor support to promote economic growth, the current and planned activities of the donor community, and those areas deemed ripest for cooperation, this chapter concludes with a brief assessment of those areas USAID/Zambia should consider most closely.

6.3.1 Private Sector Development Opportunities

USAID may consider involving itself in the following private sector activities and niche sectors, which are considered to have the most potential for increasing competitiveness in trade and investment and encouraging growth in employment and incomes.

Policy design and implementation. USAID may intervene in policy design as an integral part of institutional strengthening to formulate and implement policy. The following may be considered:

- i) Provide financial support to policy formulation and consensus building so that policy formulation and approval may be facilitated.
- ii) Work closely with the private sector in the design, formulation and implementation of policies.

One topic for which USAID has considerable comparative advantage in policy design and implementation is the impact of HIV/AIDS on private sector development across all sub-sectors. HIV/AIDS affects unit labor costs and worker productivity, and thus competitiveness overall. As a member of SADC, the private sector in Zambia should follow the Model Code of Practice for addressing HIV/AIDS in the workplace, yet not all enterprises are aware of the Code nor do they possess the knowledge and skills to practice it.

USAID's EG SO team should collaborate more closely with its USAID's Health-Population-Nutrition (HPN) team to explore potential interventions that would address the needs of the private sector. The training that USAID has supported with CLUSA, the Zambia Chamber of Small and Medium Business Associations and the District Business Association in Livingstone is a good start, but the policy arena could benefit from attention. The Global Health Bureau Policy Project's AIDS Impact Model might be adapted, for example, to different scenarios for specific sub-sectors to determine how different levels of investment in prevention of HIV/AIDS might affect long-term sub-sector productivity. Also, increased collaboration on policies and programs related to elimination of stigma and discrimination; confidentiality for affected workers; management approach to the epidemic; periodic workplace programs; worker benefits; including care and treatment issues; are key topics to be pursued. The AGOA Forum Plenary Session on HIV/AIDS held in Washington, DC in October 2001 identified a

number of positive experiences that could be discussed and possibly adapted for Zambia.¹⁹

Agribusiness. Cotton yarn, textile and apparel, sugar and coffee (processed) have also the potential for increased exports for Zambia being producer of primary commodities. Diversification for this production sector and the redevelopment of the private sector in terms of value adding, facilitation of commodities/products with potential for regional and international markets is critical. Thus support for development and marketing of such commodities is essential. The US market through AGOA is critical for Zambian textile and garment exporters once the visa requirements have been met.

Gemstone Industry. The gemstone mining can be a viable industry once the logistics -- i.e. infrastructure (transportation and communication), production and marketing systems -- are in place. However, the marketing methods have been unsatisfactory and intermediaries have taken advantage of the marketing situation, thereby obtaining gemstones directly from the workers at the expense of the mine owners. Even in cases where the intermediaries get the gemstones from the mine owners themselves, there is lack of skills in valuation of the products and this greatly disadvantages the producer who has no other immediate market for the product except the intermediaries. This affects the returns as well as the capacity to reinvest in the sub-sector. A lot of tax revenue is lost in illicit trafficking of gemstones. Government has indicated that it will reintroduce the Gemstone Exchange scheme to serve as a forum for the producers and the buyers of rough and processed gemstones and jewelry to conduct auctions and routine transactions. Therefore, the re-introduction of the Gemstone Exchange Scheme will serve as a forum for the producers and the buyers of rough and processed gemstones and jewelry to conduct auctions and routine transactions. The gemstone exchange will also encourage the participation of traceable gemstone trading and marketing companies rather than individuals, in order to promote transparency and accountability. This will revitalize the sector and increase the incomes of the communities around the mining operations. There will be more production because of the availability of, and accessibility to, the market for the products.

The support that USAID may give to the gemstone mining will be in form of policy reform and legal framework and capacity building. A study should be undertaken in these areas. The reason why this support should be given by USAID is that the current diversification program on the Copperbelt has become critical. SMEs such as gemstone mining are critical to the growth of Zambia and can bring improvement in the livelihood of the communities.

¹⁹ See the “African Growth and Opportunities Act Forum, Plenary Session on HIV/AIDS,” Washington, DC, October 2001, available for downloading through USAID’s Development Experience Clearinghouse at www.dec.org. The assessment team highly recommends that SO1 and its partners read and discuss the report, particularly Papers 2 and 4.

6.3.2 Agricultural Sector Development Opportunities

In light of both opportunities in the agricultural sector and the current and future plans of other donors, the assessment recommends five specific areas for continued or new USAID support. The five include conservation farming; warehouse receipts; dairy industry development; promoting cassava as an alternative crop; and continued support to out grower schemes (horticulture, floriculture).

Conservation Farming. The rationale for promoting the spread of CF is straightforward. It is a proven approach that can help smallholder producers diversify their production and increase income. This approach also has positive food security implications. USAID should work in collaboration with other donors supporting the dissemination of CF to reach the assumed saturation level of 250,000 farm families across the country. The assessment team acknowledges that in one important aspect CF is not particularly HIV/AIDS friendly as the initial labor requirements for CF are substantial. Digging over 15,000 holes per hectare is demanding. However, the labor requirement for field preparation diminishes overtime, and can be carried out over the six month dry season, when there are fewer demands for their labor. In addition, use of the weed wipe reduces significantly labor required for weeding. USAID, through its partners and the Zambian Network of Persons Living with HIV/AIDS, might hold some focus groups to identify potential interventions to mitigate the difficulties for families affected by HIV/AIDS and/or PLWHA to adopt CF.

Warehouse Receipts. The assessment team is of the opinion that the day when farmers will be able to secure mortgages with title deeds is in the distant future. Warehouse receipts are a much more likely tool to meet some of the pent up demand for short-term capital. The program ZACA has in place is well grounded and should receive the resources needed to expand rapidly once the legal and regulatory system is modified so that financial will accept receipts as collateral.²⁰

Dairy Industry Development. The dairy development initiative that Land O'Lakes and its partners have in place appears to have achieved initial success. The available evidence suggests that there is unmet demand for fluid milk. The dairy development program provides smallholders a ready opportunity to increase household income as well as contribute to improve food security. In addition, the dairy development program can play an important role in helping rebuild the livestock herd, which has been decimated by disease. Longer term there may be the potential to introduce a school milk program, which also would address positively food security concerns.

Crop Diversification – Cassava. A major theme running through the agricultural sector is to distance the country from its near monoculture past and use its comparative advantages in land availability and water resources to diversify the product line. Cassava, in particular, has many ardent supporters, although is not without controversy. Cassava served as a food security crop in colonial times. It therefore has the potential to play an

²⁰ It is interesting to note that the European Union has recently funded a US\$100 million warehouse receipts initiative in Kazakhstan. This is a strong endorsement of this particular financial instrument.

important food security role. Cassava also is an industrial crop. It is a raw material for starch. Nutritionally, the crop is controversial; some nutritionists worry that that as a food crop cassava is only “empty” calories. USAID could play an instrumental role helping the GRZ organize a national debate on the advantages and disadvantages of cassava, eventually leading to a national cassava development strategy and plan. The Southern African Regional Research Network (SARRNET), which works with USAID’s Regional Center for Southern Africa (RCSA), has an on-going cassava program and could offer valuable input into the debate.

Out-grower Schemes. USAID’s efforts to date to promote out-grower schemes on horticulture and floriculture have been significant. There also appears to be potential in other crops including organics and coffee. However, the impact that these product lines can have on employment and income is limited. In these and other sub-sectors, USAID should continue to promote efforts to link smallholder producers to agribusiness processing and marketing firms.

6.3.3 Natural Resources Sector Development Opportunities

USAID may wish to consider involving itself in the following activities that are considered to have the greatest potential for increasing competitiveness in natural resources management and poverty reduction by increasing employment and incomes:

Extend the Community-Based Natural Resources Management approach as pursued through CONASA to the Bangweulu GMAs and the Kafue Flats GMAs.

Build the capacity of institutions dealing with natural resources management, i.e. ZAWA.

Develop basic infrastructure in protected areas, particularly in lower Zambezi and South Luangwa National Parks.

CHAPTER 7: OPTIONS FOR A NEW ECONOMIC GROWTH STRATEGY AND RESULTS FRAMEWORK

The final chapter of this assessment presents the options from which the SO 1 Team might choose to direct its future efforts to accelerate the rate at which Zambia's economy grows. It builds on the previous chapters and culminates with a proposal for a new economic growth strategic framework for USAID/Zambia's new strategic plan period. The successes of the current strategy provide a solid foundation for future initiatives and activities. USAID/Zambia has recognized comparative advantages, which any new efforts should maximize. There are numerous ways in which USAID/Zambia could program its economic growth resources. The third section of this chapter provides a summary of the options and recommends those that offer the most potential. The chapter concludes with a preliminary results framework for a new Economic Growth (EG) SO.

7.1 Contribution and Impact To Date of the Economic Growth Program

Overall, USAID/Zambia's economic growth program has had a positive impact and has built up considerable momentum going into the next planning period. As noted in the Mission's FY 2002 Annual Report, it:

Helped improve rural incomes through support for a liberalized economic policy environment and innovative programs dealing with agriculture and non-farm enterprises, conservation-related farming technology, and community-based natural resources management in protected areas.

Focusing more closely on SO1, the report concludes that "Overall, this SO met its expectations as the successes of farmers and rural non-farm enterprises (RNFE)s have resulted in market efficiency, access to microfinance, increased productivity and diversification." A brief review of some of the quantifiable results supports this conclusion.

The performance against the SO Level Indicator – "Incomes of selected rural groups" has been impressive. During the timeframe of the current strategy, the incomes of rural farms and non-farm enterprises has increased 3400 percent, from a 1977 baseline of US\$240,000 in 1997 to US\$8,608,738 in 2001. The past year was the first in which the results did not surpass the annual target. In a very difficult economic environment the reported increase was 11 percent against a target of 20 percent. As noted in the FY 2002 Annual Report, "The drought in parts of the country and an above average rainfall and flooding in other areas caused major food deficits and declines in agricultural production and had a negative impact on related income generation." In such an environment, an 11 percent increase is a significant accomplishment.

Performance as measured against each of the Intermediate Results is equally impressive. Actual performance for IR1.1 "Number of farmers adapting improved technologies" exceeded the target by nearly 48 percent. A total of 59,071 farmers, 33,029 men and

25,952 women – 56 and 44 percent, respectively – were reported using improved technologies, against a target of 40,000. The total increase since over the course of the current strategy is 44,071 or 293 percent.

Although two of the three indicators used to measure IR1.2 “Increased Contribution of Rural Non-Farm Enterprises to Private Sector Growth” showed negative results for 2001, the longer-term results are very favorable. For example the value of credit accessed (Indicator 1.2.1) declined by 13 percent in 2001. However, since 1997 the figure has increased almost ten fold, from US\$210,000 to US\$2,046,516. It is interesting to note that while the value of credit accessed by male borrowers declined almost 32 percent in 2001, the value of credit accessed by females increased almost 52 percent, from US\$539,645 to US\$818,606. Overall, females accounted for 40 percent of the value of credit accessed in 2001. This is a dramatic increase over their market share of 23 percent in 1998.

Indicator 1.2.2 “RNFE sales and service revenue” also registered a decline for 2001, but long-term results are positive. Overall sales dropped by 23 percent for the year, with those attributable to men falling 25 percent and to women by less than 19 percent. Since 1997 overall sales have increase a factor of 14. Women’s share of total sales and service revenue has increased from 28 percent in 1998 to 40 percent in 2001.

The third indicator used to track IR1.2 is “RNFE outreach (number of clients).” This is a measure of the “Number of clients/members that belong to RNFE supported institutions, disaggregated by gender.” The results for 2001 were positive. Against a target of 48,000, the indicator reported 79,719 clients/members of RNFE supported institutions, including 35,101 women and 44,556 men. The total number of clients/members has increased almost 300 percent since 1997.

IR1.3 “Improved Trade and Investment Environment” has a single indicator, the “annual value of non-traditional and natural resource and tourism exports.” As noted in the Performance Monitoring Plan²¹, the Export Board of Zambia’s classification of non-traditional agricultural and natural resources exports includes animal, wood, floriculture, and horticulture products, gemstones, handicrafts, leather products, agricultural commodities, processed foods and textiles, and since FY 2000 has also included tourist receipts from licensed tourist operators as part of natural resources exports. The figure reported for 2001, US\$300 million, represented a 12 percent increase over the previous year, against a target increase of 15 percent. Exports attributable to agriculture and natural resources declined marginally (3%), while tourism’s exports increased almost 41 percent, from US\$91 to 128 million.

7.2 USAID’s Comparative Advantages in Zambia

The interviews that the assessment team conducted, and to a lesser extent the literature review, generally confirm the comparative advantages SO1 stakeholders identified during

²¹ USAID/Zambia Performance Monitoring Plan FY 2001 Edition

their day long consultations in May.²² The participants identified comparative advantages under five different themes, including:

- Policy Design and Implementation;
- Food Security;
- Financial Services – Microfinance as a Tool for Poverty Alleviation;
- Transition from Being Producer or Primary Commodities to Value Added Commodities; and
- Access to Information

7.2.1 Policy Design and Implementation

Under the theme of policy design and implementation, the meeting's participants identified the breadth and depth of experience USAID/Zambia can bring to policy issues, the reputation for doing policy in a transparent manner, its relatively quick response time, and its willingness to leave "implementers alone to make policy changes." However, the audience noted some disadvantages as well. The key informant interviews the assessment team conducted generally confirmed these findings. While comments about the work done to date were mostly favorable, several interviewees questioned the longer-term impact of doing policy studies in relative isolation. There is a faction within the development community that believes it would be more effective if donors pooled their resources and conducted large policy analyses in a more collaborative and cooperative manner. The supporters of this approach assume that this will force the donor community to reach a consensus on major policy issues and therefore communicate to the GRZ as one. Another, more widely held view was that donor policy analyses should be carried out in close collaboration with local institutions.

7.2.2 Food Security

According to its stakeholders in Zambia, USAID has several comparative advantages in addressing food security issues. They noted such attributes as responsiveness, access to different funding mechanisms, the ability to employ a multi-sectoral approach, and the willingness to work with local partners. Disadvantages included the lack of willingness to pool resources and a propensity to set up parallel structures, which can create conflict at the field level. The assessment team speculates that USAID's role in food security is now somewhat blurred by the controversy over genetically modified organisms (GMO). However, through FEWSNet and the FSRP, USAID/Zambia is supporting unique activities that make important contributions.²³ Food security is an important cross-cutting issue and one where USAID has the capability to make significant contributions.

²² See *USAID/Zambia Mission Country Strategic Plan (CSP) Stakeholder Consultation: Process Report on USAID/Zambia Economic Growth Program (SO 1)-Stakeholder Consultative Meeting*. 22 May 2002.

²³ Although outside its mandate, the assessment team perceives that there is an apparent gap in the food security effort. That is monitoring of the nutritional status of the population as an on-going measure of utilization of food resources. This is outside the economic growth team's manageable interest however, and underscores the cross-cutting nature of food security.

7.2.3 Financial Services – Microfinance as a Tool for Poverty Alleviation

USAID has been at the forefront of micro-enterprise development, including microfinance. This global experience is one of the comparative advantages noted by SOI's stakeholders. They also referenced to the ability to influence regulations and an ability to work directly with implementing partners. Disadvantages included bureaucracy. USAID/Zambia could draw on substantial agency experience to expand its involvement in microfinance. The Office of Microenterprise Development (EGAT/MD) is about to award a series of Indefinite Quantity Contracts (IQCs) that will allow missions to issue task orders for technical assistance to develop, guide and support microfinance efforts, as well as to address enabling environment and business development services issues.

7.2.4 Transition from Being Producer of Primary Commodities to Value Added Commodities

USAID/Zambia offers strong comparative advantages to assist with, if not lead, donor-funded efforts to promote the expansion of value added processing of agricultural output. The stakeholders cited, among others, access to resources, innovative pilot programs, and a demand-driven, market focus as advantages. Disadvantages included high delivery costs and sector restrictions. Another important comparative advantage is the expertise USAID/Zambia can draw upon from regional projects. Here it is important to note the resources that the Mission can access through the Southern Africa Global Competitiveness Hub. This regional initiative includes both a sanitary and phyto-sanitary specialist and an AGOA specialist. The former has the expertise to help current and potential food exporters meet the food safety requirements of their potential customers; the latter can provide expertise in accessing the U.S. market.

7.2.5 Access to Information, Education and Health

According to the stakeholders, USAID has several comparative advantages when it comes to providing access to information, education and health, all of which are deemed important for economic growth. These include strong technical support with regional experience, willingness to work with the private sector, and a strong presence in agriculture, extension services, education, health, HIV/AIDS, and credit. The noted disadvantages were mainly logistical and administrative. The assessment team notes that USAID has a comparative advantage helping both private sector firms and business organizations to use communications technology to do market research and access vital market information.

7.3 Alternatives and Recommendations for Future Assistance

The number of constraints on Zambia's ability to grow and prosper economically is large. As a result the number of alternatives from which USAID has to choose to develop its next strategic plan, which will cover the five year period from October 2003 through September 2007, is considerable. The sections that follow summarize the alternatives the

team has to promote economic growth, looking in turn at private sector development, agriculture, and natural resources management.

7.3.1 Alternatives and Recommendations for Future Assistance to the Private Sector Development

To date, the portion of the SO 1 portfolio that has been labeled private sector has had a strong policy orientation. This has been appropriate in the Zambian context and has generally worked well. The efforts of the policy-oriented activities, namely ZAMTIE and the FSRP, have been well received.

Alternatives

ZAMTIE has pursued an operating policy of responding to requests for assistance. The risk is pursuing this course is that it could diminish the overall impact of its efforts. An alternative is to focus its activities more narrowly on a few commodity systems and/or industries and do more in depth research in each. For example, ZAMTIE could frame its work to look at the policy framework influencing a few sub-sectors, which would cover input supply (including finance), production, processing, marketing and human resource development, with special attention to addressing HIV/AIDS.

The policy component also has to be selective about the local institutions with which it partners and the ones to which it devotes its most intensive institutional capacity building efforts. The alternatives include a narrow focus on the local organizations serving the agribusiness and agricultural sectors, namely ACF and ZANU/ATF, or broader based organization such as the ZAM. The number of ministries and other organizations with which to work in the public sector is also large.

Recommendations

The assessment team recommends that the policy component of the follow-on to SO 1 – the new “EG SO” -- pursue a more vertically integrated, sub-sector focus. For example, studies focused on the maize and cotton sectors might help identify opportunities that could have a significant number of smallholder households. Dunavant Cotton has just announced expansion plans, in part funded by the U.S. Trade Development Agency, which could create employment for as many as 40,000 out growers.

It would be extremely useful to prepare a complete “structure, conduct, performance” analysis of the financial sector. This would cover the entire financial services industry from the Bank of Zambia to the most informal of the microfinance institutions, and include commercial and merchant (investment banks), savings banks, the Development Bank of Zambia, insurance companies, pension funds, and the Lusaka Stock Exchange. This would be the beginning of an effort to get the commercial banks, in particular, to diversify their portfolios, i.e. make more loans to agriculture and agribusiness, as well as identify opportunities to create linkages between different players. For example, it would be worthwhile to investigate what it would take to get commercial and merchant banks, insurance companies, and pension funds to invest in microfinance institutions. Much of the data to do this study is likely to be available from the International Monetary Fund

and other sources within the country. But it is important information to pull together in order to develop a coherent financial sector strategy. The office that manages USAID's Development Credit Authority (DCA) might be a useful partner in this effort.

7.3.2 Alternatives and Recommendations for Future Assistance in Agriculture

Zambia has abundant arable land and significant water resources which give it significant comparative advantages in agriculture. The challenge for the EG SO Design Team is to determine where it should funnel its resources to promote rapid growth in this sector.

Alternatives

The choice of where to focus its limited resources has two principal dimensions: commodity and geography. The major commodities for consideration include cotton, maize, dairy, livestock, cassava, coffee, horticulture, floriculture, essential oils, and fisheries. The current portfolio of activities touches each of these with the exception of fisheries. The work that USAID, and other donors, are supporting to introduce and expand the use of CF techniques has the potential to have a significant impact on the maize, soybean and cotton sub-sectors and affect a significant number of smallholder households. Also, identifying ways in which households affected by HIV/AIDS can benefit from CF – through communal land preparation or use of alternative technologies that decrease the labor burden – could have important impact on poverty. Investment in the dairy industry can play a crucial role in helping to rebuild the livestock herd that has been decimated by disease. As discussed earlier in this assessment cassava has the potential to fill a dual role as both food security and industrial crop. USAID's efforts in floriculture and horticulture have been impressive and should continue, although the employment and incomes impact of these sectors is considerably less than cotton and maize. The same may be said for coffee.

The geographic focus of USAID's activities in agriculture will, in large part, be a function of the commodity choices.

Recommendations

The assessment team recommends that first and foremost the EG SO Team continue to emphasize activities to expand use of CF and CT approaches, with the recognition that this is a short-term, but quick response initiative. It is reasonable to expect reaching the estimated "saturation" point of 250,000 smallholder households within three years. Given that it supports several NGOs which incorporate CF and CT as part of their programs, USAID is well positioned to take the lead in making sure that all the donors supporting CF and CT collaborate and cooperate. The sharing of lessons learned can be invaluable.

The dairy sub-sector deserves special attention and USAID is well positioned to build on the Land O'Lakes-led Zambia Dairy Enterprise Initiative. Again, this is a relative short-term activity to respond to forecast pent up demand for fluid milk and to develop dairy's export potential.

A third area that deserves special attention begins to address the critical issue of access to capital. The nascent warehouse receipts program is adapting a proven financial tool to the Zambian context. Given that the country has ample storage capacity, supporting ZACA to roll out its program once the enabling legal and regulatory concerns are addressed is deemed a very high priority.

7.3.3 Alternatives and Recommendations for Future in Natural Resources

Zambia's wildlife and forestry resources are valuable assets. They require prudent management in order to generate wealth of a sustainable basis.

Alternatives

A major issue confronting the SO 1 Team is how best to manage the country's wildlife and forest assets. The current portfolio of activities supports three different activities that are approaching this challenge in different ways. The three include CLUSA CBNRM model, the World Vision International agro-forestry model, and the CARE CONASA model.

Recommendations

As documented in Chapter 5, the assessment team recommends that future activities concentrate on formation of community-based organizations in GMAs that will contribute to sustainable management of the country's wildlife resources and community-based organizations that will promote sustainable management of the forests. It believes that the CARE CONASA model offers the most promising way to achieve a long-term, sustainable impact.

7.4 Preliminary Results Framework and Illustrative Activities

This assessment concludes with the presentation of a preliminary Results Framework for Economic Growth Strategic Objective for the period beginning 1 October 2003. As documented earlier in this chapter, the current SO 1 framework has proved sound and has served the team managing the Mission's economic growth portfolio well. The strategy has produced significant results.

7.4.1 Options for a New Strategic Framework

The assessment team considered three broad options in developing a preliminary strategic framework. The first option was to acknowledge that the current framework has served the SO 1 Team well and that it requires little modification for the follow-on EG SO. However, the current framework does not fully reflect some of the changes in the environment in which SO1 activities are taking place. This is not a criticism of the current framework, but rather an acknowledgement that the framework that will guide the Mission's economic growth activities from 2003 through 2007 needs to reflect these changes. Perhaps the best example of these changes is the broad acknowledgement that agriculture will be the Zambian economy's engine of growth in the near to medium-term.

A second option was to recommend sweeping changes to the current strategy. The motivation to pursue this course comes from the observation that the current portfolio funds a number of interesting and worthwhile activities, but they do not appear strongly linked. As a result the SO1 Team is missing opportunities for increased synergy from its efforts. The portfolio is one that appears to pursue targets of opportunity in private sector policy reform and dialogue, agriculture and natural resources development. An alternative to this approach would be one that had all activities narrowly focused on a few commodity sub-sectors. For example, the assessment team believes it would be possible to make the case that the new EG SO activities should be narrowly directed to generate growth in the cotton and maize sub-sectors, at the exclusion of working elsewhere. The primary rationale for such an approach is that these two crops are important to very large numbers of smallholders. Clearly, the risk of pursuing such an approach is that it foregoes the flexibility to pursue targets of opportunity, such as ZAMTIE's effort to link a gemstone mine with a local lapidary. Given the overall success of the economic growth strategy to date, the assessment team concluded that this type of major restructuring was not warranted.

As a result, the preliminary results framework presented in Figure 7.1 represents the middle ground. The assessment team has made a concerted effort to modify the existing framework in a way that is sensitive to changes in the Zambian economy. The overall intent of the changes proposed here is to broaden the scope of the economic growth program. For example, the proposed strategic objective shifts the focus from the household level to sector level. The assessment team believes that this is fully compatible with the broad policy statements that have identified agriculture as the engine that will drive Zambia's economic growth in the foreseeable future. Clearly, for this to happen the firms that add value to the production of the country's farmers and ranchers will have to become more competitive in local, regional and global markets. The ability to sell more product serves as a proxy for increased competitiveness.

7.4.2 Preliminary Strategic Objective and Indicators

The assessment proposes the following new strategic objective to guide USAID/Zambia's efforts to promote economic growth:

Strategic Objective: Increased private sector competitiveness, especially agriculture and natural resources based enterprises, in local, regional, and global markets.

The preliminary results framework is presented in Figure 7.1 overleaf. A discussion of key elements follows the figure.

FIGURE 7.1 PRELIMINARY ECONOMIC GROWTH RESULTS FRAMEWORK

<p align="center">SO: INCREASED COMPETITIVENESS OF PRIVATE SECTOR, ESPECIALLY AGRICULTURE AND NATURAL RESOURCE BASED ENTERPRISES, IN LOCAL, REGIONAL AND GLOBAL MARKETS.</p> <p><u>Indicators:</u> Growth in agriculture sector's contribution to GDP. Growth in agriculture and natural resource-based exports. Growth in agribusiness sector's contribution to GDP.</p> <p align="right">Growth in tourism's contribution to GDP. Decrease in HIV/AIDS prevalence rates among 15-24 year olds.</p>			
<p>IR1: Increased Smallholder Production of Commercial and Staple Crops</p> <p><u>Indicators:</u> 1.1 Number of farmers adapting improved technologies, disaggregated by gender and by PLWHA. 1.2 Increased incomes of commercially oriented farmers, disaggregated by gender and by PLWHA. 1.3 Increased production of selected staple crops in target areas.</p>	<p>IR2: Expanded Market for Business Development Services</p> <p><u>Indicators:</u> 2.1 Firms providing BDS. 2.2 Sales of BDS providers. 2.3 Access to finance.</p>	<p>IR3: Increased Community Control over and Income from Natural Resources</p> <p><u>Indicators:</u> 3.1 Area of game management areas under control of community-based organizations. 3.2 Households benefiting from income derived from community-based natural resources management activities, disaggregated by gender of household head and households affected by HIV/AIDS.</p>	<p>IR4: Improved Enabling Environment</p> <p><u>Indicators:</u> 4.1 Domestic investment in agriculture, agribusiness, and tourism. 4.2 Foreign direct investment in agriculture, agribusiness, and tourism. 4.3 Zambia's <i>Institutional Investor</i> ranking. 4.4 Zambia's <i>Transparency International</i> ranking. 4.5 Businesses adopting SADC Code of Conduct on HIV/AIDS and employment, as relevant to business size.</p>
<p>CRITICAL ASSUMPTIONS</p> <ol style="list-style-type: none"> Government of Zambia remains firmly committed to making agriculture and natural resources the engine of economic growth. Current drought ends and rainfall patterns return to normal. Investments under PRSP begin to address the major problems in infrastructure that constrain agriculture and natural resources sector growth and development Political and economic stability in region provides a level playing field for increased trade Government policies lead to macro-economic stability, reduced borrowing leads to lower interest rates. HIV/AIDS prevalence levels decrease or stabilize. 			

The preliminary framework proposes the following indicators to measure progress towards this objective:

- Growth in agriculture sector's contribution to GDP.
- Growth in agribusiness sector's contribution to GDP.
- Growth in agriculture and natural resource-based exports.
- Growth in tourism's contribution to GDP.
- Decrease in HIV/AIDS prevalence rates among 15-24 year olds.

A brief rationale for each indicator follows.

Looking at both the absolute and relative contribution of agriculture to gross domestic product (GDP) will indicate whether or not the sector is fulfilling its role as the economy's engine of growth. This indicator is readily available from the national income accounts.

Measuring growth in the agribusiness sector's absolute and relative contribution to GDP is more complicated. This requires extracting data for agribusiness firms – value-added processors of food and fibre products, manufacturers of inputs such as seed, breeding stock, fertilizer, herbicides, and pesticides, and services such as storage, transportation and finance – from the national accounts data and calculating an agribusiness GDP. This is an intensive process, but one worth taking to pursue more of an agribusiness, as opposed to agriculture, development strategy.²⁴

Data for agriculture and natural resource-based exports is readily available from the Export Board of Zambia. The ability of the country's firms to sell more of these products in regional and more distant markets serves as a proxy for competitiveness. Tracking this statistic may help identify specific trade problems that merit additional study and analysis.

Tourism's contribution to GDP serves as a one proxy for how well the country is managing its natural resources, most notably wildlife.

A decrease in HIV/AIDS prevalence, particularly among the emerging workforce aged 15-24, indicates that some of the high costs associated with the HIV/AIDS epidemic – the need for redundant training, low worker output, absenteeism, health care costs, etc. – will be decreasing, thus increasing per unit labor productivity and competitiveness overall.

These indicators are admittedly broad in scope and raise the issue of attribution. The fifth indicator, in fact, would probably be more attributable to USAID's HPN SO. The assessment team recognizes that many factors will contribute to the ability of Zambian firms to compete more effectively in the future. As discussed in section 7.3 above, the

²⁴ Several years ago USAID's Global Agricultural Policy Analysis Project, Phase III (APAP III) developed this approach to measure agribusiness GDP. The project put the methodology to use in several countries, for which studies should be available through CDIE.

team believes that USAID can “materially affect” competitiveness in selected sub-sectors that will in turn impact overall sectoral performance. Many initiatives, however, including those launched under the PRSP and other donor programs, of which USAID’s efforts only constitute a small part, will drive the results. This will require a reporting system that includes qualitative input to substantiate USAID’s impact. For example, the system might include a case study of how a particular firm took advantage of change in policy brought about by a USAID-funded activity to increase its business.

7.4.3 Preliminary Intermediate Results and Indicators

The preliminary results framework increases the number of intermediate results (IR) from the current three to four. Based on its analysis, the assessment team concluded that the framework needed a distinct IR to maintain better focus on the natural resources-based component of the overall strategy. For this reason it narrows the scope of the proposed new IR1 to agriculture and proposes a new IR3 focused on natural resources. In addition, the preliminary framework shifts the emphasis of IR2 to business development services and broadens the scope of the policy-related IR4. The rationale for each IR and its indicators follows.

IR1: Increased Smallholder Production of Commercial and Staple Crops

The country’s farmers will have to produce more crops and livestock if agriculture is to become as the engine of growth. The analysis presented in this assessment suggests that the rapid adoption of conservation farming and conservation tillage techniques can lead to a significant supply response. Therefore, tracking the number of smallholder households employing CF and CT approaches remains an important indicator. As noted earlier, the director of the Conservation Farming Unit as estimated the saturation point for these techniques is on the order of 250,000 of the country’s 800,000 smallholder households. The SO 1 Team already has in place a reporting system to capture the number of households using CF and CT in activities implemented by USAID-funded grantees and contractors. The assessment team recommends that the multiple donors supporting CF initiatives collaborate to pool their data on dissemination and adaptation to track the overall progress towards the target of 250,000 households.

It is important to monitor the incomes effect the adaptation of improved technologies and enhanced marketing opportunities is having on smallholder households. That is the purpose of Indicator 1.2 Increased incomes of commercially oriented farmers. This is the same information the current strategic framework is capturing at the SO level, as it is modified following the Data Quality Assessment undertaken concurrent with this sector assessment.

Lastly, the preliminary framework presented herein recommends an indicator that adds the “availability” dimension to USAID’s cross-cutting work on food security. As stated earlier, the team understands that attention to food utilization is more the purview of USAID’s HPN team than the EG team, and that the EG team should more appropriately focus on food access and food availability. Whereas indicator 1.1 captures production inputs – e.g. adoption of technologies – that are assumed to increase production of both

commercial and staple foods, indicator 1.3 captures absolute increased food availability, in terms of production of staple crops, notably maize and possibly cassava. Indicator 1.2 is a proxy for increased access to food, given the hypothesis that households will use increased income to assure they have adequate food. All three indicators would thus be measuring the EG SO's contribution to improving food security, at least for target areas in which USAID programs are operating. (See Annex D).

The first two indicators would disaggregate reporting in terms of total households/farmers, women-headed households/women farmers, and households affected by HIV/AIDS and/or PLWHA farmers, to the extent that the latter are voluntarily identified. Disaggregating data by gender is required by USAID. Given concerns expressed earlier about the labor burden of CF being a problem in households affected by HIV/AIDS, the assessment team suggests that by establishing targets and requiring such disaggregated reporting, the implementing partners will be encouraged to address the concerns appropriately. The team recognizes, however, that this may not be feasible given issues of confidentiality, and suggests the EG SO Design Team discuss the possibility with the HPN team.

IR2: Expanded Market for Business Development Services

The preliminary framework proposes a reworking of the current IR1.2, with the emphasis shifting from RFNEs to one focused on creating markets for business development services. RFNEs will continue to be important under this IR, but the emphasis shifts perspective from the individual firm to the market. The indicators will focus on the number of firms in the business of providing services to agriculture and natural resource-based business. The number of firms that provide a particular service – input supply, marketing, finance, technical training – serves as a proxy for the particular market's competitiveness. Sales are an important indicator of whether or not the market is healthy and growing. As noted throughout earlier sections of this assessment, inability to access capital is a major constraint on growth in Zambia. Therefore it is important to monitor the ability of BDS providers to obtain the financing required to expand and improve their operations.

IR3: Increased Community Control Over and Income from Natural Resources

The most significant change in the new EG SO preliminary results framework from the current SO1 framework is the addition of a distinct intermediate result focused on the natural resources sector. The current framework includes natural resources under IR1.1 Increased Agriculture and Natural Resources Production.

As presented in Chapter 5, the natural resources management challenge is different from the agricultural one. Zambia's wildlife and forests constitute significant assets. As with any asset, they require sound and prudent management to generate income on a sustainable basis. The first part of the process is to have local communities take greater responsibility for the management and safekeeping of these assets. For that reason the framework proposes an indicator that measures the creation and reach of community-based organizations exerting control over the country's game management areas and forests. These community-based organizations are legally constituted. The second

indicator tracks the flow of revenue the community receives as a result of its efforts. For example, this indicator would track the funds community-based organizations receive from ZAWA's issuance of hunting permits. The assessment team is confident that the data for both indicators will be readily available. The firms and organizations implementing activities under this proposed IR should be capable of reporting both the area under the control of the community-based groups with which they are working and the amount of funds that flow to these communities in accordance with established legislative mandates. The reporting out of how the communities use these resources will be more qualitative in nature.

Again, for indicator 3.2, reporting should be disaggregated by total number of households, women-headed households, and households affected by HIV/AIDS to the extent that they are voluntarily identified (subject to discussions with the HPN team). The concern here is that there may be stigma associated with AIDS and that households may be discriminated against in terms of sharing benefits of community management schemes. The intent of the disaggregated data requirement is to underscore USAID's desire that all households in a community have equal access to benefits.

IR4: Improved Enabling Environment

Finally, the preliminary framework includes a slightly modified, policy-oriented intermediate result. As noted, the activities that are tied to the current policy-oriented IR – most notably ZAMTIE and FSRP – have done very good work. Trade and investment will remain important areas for policy analysis under the new strategy. However, it is the assessment team's conclusion that policy concerns going forward will be broader in scope.

The proposed IR is based on the hypothesis that the overall economic environment will have to become more enabling if the Zambian private sector is going to compete more effectively in local, regional and global markets. The constraints that impede increased competitiveness encompass more than trade and investment concerns. Strategies are falling into place to begin to address many of these. As noted throughout this assessment, the lack of infrastructure is an oft-quoted concern. It is a constraint that affects the social sector and well as the private sector. Therefore, the agriculture-agribusiness sector will have to compete against other interests if these strategies are to address the sector's priorities.

For example, the PRSP has an overall budget of US\$1.3 billion for the period 2002-2004. Of that total, US\$251 million is for transport and communications policy actions. This figure is in addition to work that will fall within the normal budget. Within this budget, the single largest line item has as an objective “[t]o maintain paved and unpaved roads, including feeder roads.” The specific “Policy Actions/Action Plans” in this category include US\$110 million in PRSP funding to “[b]roaden the revenue base of the Road Fund and dedicate it to maintenance of roads in good and fair condition.” Other actions, all to be covered within the normal budget include the promotion of “community

participation in road management” and carrying “out maintenance of paved and unpaved roads.”²⁵

A major policy concern for the private sector, in general, and agriculture, agribusiness and natural resource-based enterprises, in particular, is how to make sure that a significant portion of these resources flow to removing transportation problems that have the greatest impact. This is essentially a policy analysis and lobbying issue. The Ministry of Agriculture and Cooperatives needs to be involved in the decision making process that will determine where the resources go. In the case of roads, the Ministry of Works and Supplies is the decision-making unit. It is unreasonable to expect the MAC will do the analysis required of its own volition. Ultimately, the private sector will have to take the initiative. This should be an issue on which a coalition of forces, including the ACF, ZNFU, and others, do a detailed analysis of where investments to improve roads would produce the greatest return for their stakeholders. ZAMTIE has the potential to play a critical support role in a policy dialogue of this nature. It is one example of how the policy concerns of most interest to the EG SO Team will reach beyond trade and investment in the future.

The preliminary results framework proposes five indicators to monitor progress towards achieving this IR. The indicators proposed have the advantage that they are objective and quantifiable. However, for the first four, this comes at the expense of being attributable to specific USAID-funded interventions. This is an inherent problem with policy-oriented IRs. Obviously, increased domestic and foreign investment and improved ratings in objective polls as proposed here are going to be the end results of many contributing factors. USAID-supported interventions will play but a part in the overall process. This will necessitate qualitative reporting that documents how specific USAID-funded activities contributed to improvements in the proposed indicators.

The fifth indicator relates to increasing both internal efficiencies, as application of relevant elements of the Code of Conduct on HIV/AIDS and employment is expected to help businesses decrease per unit labor costs over time (as HIV/AIDS prevalence decrease in the young labor force), as well as increasing Zambian businesses participation and status in the greater Southern Africa business community.

7.4.4 Integrating HIV/AIDS

It is important that the economic growth strategy continue efforts to mainstream HIV/AIDS into all activities. For IR 1, this means, *inter alia*, identifying, implementing, and monitoring approaches to assure that smallholder households affected by HIV/AIDS – which generally have a paucity of labor, may be headed by youth or the aged, and are among the very poor – are able to participate in and benefit from production and marketing activities. For IR2, this implies BDS providing technical assistance in adoption of relevant – depending on business size -- elements of the SADC Model Code of Conduct on HIV/AIDS and employment by all businesses, including addressing potential stigma and discrimination related to access to credit and business development

²⁵ PRSP, pp.174-75.

services by PLWHA. For IR3, design and implementation would need to address both the special circumstances of rural households affected by HIV/AIDS as well as possible stigma and discrimination in community management schemes. For IR4, increased collaboration on policies and programs related to elimination of stigma and discrimination; confidentiality for affected workers; management approach to the epidemic; periodic workplace programs; worker benefits; including care and treatment issues; are key policy topics to be pursued. (The number of businesses actually implementing elements of a Code of Conduct would be measured as part of an “improved enabling environment,” but training and TA to businesses would most likely be undertaken as part of the IR2 activities.)

7.4.5 Gender

The current SO1 portfolio has provided strong opportunity for women’s participation in all activities, and the new EG SO is expected to continue in the same vein. USAID and its implementing partners also should continue the practice of disaggregating indicators by gender to monitor how well women are able to take advantage of emerging opportunities, the extent to which they are participating in expanding markets for business development services, and participating in community-based organizations providing more prudent management of vital natural resources.

7.4.6 Environmental Protection Considerations

The new EG SO, as proposed herein, includes increased attention to environmental protection through the CF approach to increasing production (IR1) and through focussing USAID’s attention on community management of resources, particularly near GMAs and other protected areas. In terms of the private sector, USAID can positively influence the policy and regulatory regime with regard to development of gemstone SMEs and other sub-sector issues with potential for strong impact on the environment.

ANNEX A

STATEMENT OF WORK

ANNEX A

STATEMENT OF WORK ASSESSMENT OF ZAMBIA'S PRIVATE SECTOR AND AGRICULTURE / NATURAL RESOURCES SECTORS

1. PURPOSE

This assessment will enable USAID/Zambia's economic growth (EG) team obtain the information it requires to contribute effectively to the design of a concept paper for USAID's next Country Strategic Plan (CSP). The consultant will:

- (i) Define EG challenges and analyze the constraints and causes;
- (ii) Identify opportunities and recommend EG activities in the context of other donors activities; and
- (iii) Recommend future strategic options, mechanisms to facilitate and accelerate sustainable economic growth in Zambia and develop a results framework in the context of earmarks and resource constraints.

In addressing the above issues, the consultant, is to provide a document structured in the four areas of (a) economic growth (identifying critical sectors with potential for rapid value-added products and services), (b) agricultural development, (c) sustainable natural resources management and (d) possible interventions in these areas, indicating what results to target and how to measure progress of achieving those results.

2. BACKGROUND

Over the period 1998 – 2003, USAID/Zambia is focusing on delivering support to programs in agricultural and natural resource production, marketing and market linkages, private sector development and capacity building for policy formulation for both the public and private sector. Activities include provision of production technologies, business training, credit and credit linkages and policy reforms. Beneficiaries include Zambian rural families, the Government, business advocacy groups and agribusiness. The current EG program funds are Development Assistance (DA) resources and include Environment, Agriculture and Microenterprise earmarks.

3.0 SCOPE OF WORK

The new CSP will contribute towards a proposed overall goal of Prosperity, Health and Hope for Zambians. Within the context of U.S. National Interest, the USAID Global Development Alliance (GDA) and Economic Growth, Agriculture and Trade (EGAT) Pillars and USAID's comparative advantage, the assessment will review and include discussions on findings as detailed below.

3.1 Sectoral Analysis:

The team will draw on a prior literature review that will have been listed and prepared abstracts for selected key documents covering Zambia's economic growth studies but will be free to review additional literature as provided in the Appendix. The team will consult with key GRZ, the private sector, farmers, USAID and other donor stakeholders. The consultations will include a series of meetings and feedback briefings as appropriate to gather information from stakeholders on their prior analyses of the context and problems, strategies, activities targeted and resources, partners, and their concerns and perspectives on opportunities. The team will make a presentation of findings and a draft report for USAID/Zambia's consideration. Upon USAID/Zambia's feedback, the contractors will prepare a final report acceptable to USAID/Zambia.

The Assessment will include the following elements:

A Definition of the Economic/Development Challenge and Analysis of Key Constraints, covering a:

- Situation analysis of the Zambian EG context.
- Listing of the key development problems and challenges in Zambia
- A suggested direction of how best USAID could address the following EG themes:

Private Sector Development:

- (a) Provide a brief assessment of Zambia's macro-economic environment.
- (b) Identify the major constraints to private sector growth in Zambia, especially constraints to small business development, with particular attention to human resources, cultural constraints, business practices, access to capital, regional and international competition, transaction costs, and infrastructure.
- (c) Identify critical sectors with potential for rapid value-added products and services, and identify constraints to accelerated growth.
- (d) Identify major opportunities for the Zambian private sector at the local, regional and international level that could be tapped to accelerate economic growth in Zambia.
- (e) Identify policy and regulatory reform required to increase trade and investment and further development of the economy, such as in the areas of licensing procedures, taxes, pricing policies, import and export controls, land tenure, or contract law.

Agriculture:

- (a) Provide a brief assessment of Zambian agriculture, clearly articulating the main constraints and policies that require reform in order to enhance agricultural development.
- (b) Determine the merit of USAID continuing to emphasize agriculture in Zambia
- (c) Identify opportunities locally, regionally and globally, to expand the Zambian agricultural sector and activities to realize those opportunities.

- (d) Identify lessons learned from implementation of various donor programs in Zambia's agricultural sector. Determine how these lessons will influence future donor, GRZ and private sector investments in the sector.

Natural Resources Management:

- (a) Provide a brief assessment of Zambia's wildlife, forest and related natural resource sectors. Identify the main actors in the utilization of these resources. Identify the main threats to the country's natural resources and opportunities for more equitable and judicious use of these resources.
- (b) Identify the institutional relationships between the lead natural resource Ministry, other public institutions nationally and various projects going on in the sector, local or "traditional" institutions (such as chiefs and village headmen), private sector operators and local communities. Determine whether these relationships promise a positive progression of the sector.
- (c) Identify the income earning opportunities being pursued by community groups living around protected natural resource. What specific aspects of those activities make them attractive? What potential income earning activities were not pursued by communities?
- (d) What government policies or orientations have facilitated or hindered the achievement of progress in the natural resources sector? Have policies changed in recent years?
- (e) What lessons have been learned from implementation of various donor programs in Zambia's wildlife and forest sector in Zambia? How do these lessons influence future donor, GRZ and private sector investments in community wildlife and forest management?

3.2 Recommend EG Activities: Options for Donors

- Identify areas for donor activities from the analysis of the private, agriculture and natural resources sector above.
- Prepare summary of interventions, which are being addressed by other donors?
- Where might greatest impact be achieved with limited resources?
- Where is cooperation with other donors likely to be most productive?
- Specifically for USAID:
 - (a) Identify private sector development activities and niche sectors, for possible involvement, that have the most potential for increasing competitiveness in trade and investment, and encouraging growth in employment and incomes.
 - (b) Identify strategic interventions for achieving rapid, ongoing, increasingly competitive and equitable agricultural sector development.
 - (e) Identify what the USAIS should focus on in the natural resources sector.

3.3 Options for a New EG Strategy and Results Framework:

Briefly review USAID/Zambia's EG program impact and lessons learned

- What has been the development impact of USAID's EG program in private sector development, agriculture and agribusiness and natural resources management including the ZSCMBA, IESC, ZAMTIE, CMS, CLUSA RGBP, CLUSA NRMP, WVIAP, CARE CONASA, ZATAC, CARE LFSP, MSU FSRP, ACF, OPPAZ, etc.? Did the program have a significant effect in increasing incomes, employment, trade and investment?
- What is USAID's competitive advantage in agriculture, private sector development and natural resources management?
- To what extent have EG activities contributed towards USAID's 1998 – 2003 economic growth strategic objective and results framework?
- What strategies and approaches have worked well and which ones have not and why? What changes are required in the strategy, results framework and activities to better address Zambia's economic growth problems?
- Prioritize a list of niche options for an EG program in Zambia.
- Based on the analysis above, USAID's comparative advantage, AID/W EGAT mandate and available resources, what are the alternatives and recommended mechanisms for future assistance in private sector development, agriculture and natural resources management.
- Develop an EG results framework, with SO and IRs and indicators of progress. Identify partners and possible development partnership alliances; development hypothesis and critical assumptions; and key constraints
- Recommend ways to integrate HIV/AIDS, gender and environmental protection considerations in the proposed strategy?

4.0 TEAM COMPOSITION AND LEVEL OF EFFORT

The assessment team will consist of three local consultants and one international / regional strategic visioning expert as follows:

LOCAL EXPERTS, supplied by one local firm, to conduct the sectoral analysis and suggest main sectoral intervention areas (Sections 3.1 and 3.2 of SOW) will comprise:

- (i) A Private Sector Development Expert;
- (ii) An Agribusiness / Agricultural Expert; and
- (iii) A Natural Resources Management / Development Expert.

The local experts will work for four (4) weeks.

INTERNATIONAL / REGIONAL EXPERT:

The International / Regional expert will be the overall assessment team leader and head of the strategic visioning work (Section 3.3 of SOW) on the team. The expert needs to be conversant with USAID strategic visioning / planning process and would preferable have USAID project development experience. Starting the assignment at the same time as the

local experts, the experts will work one week longer for a total assignment period of five (5) weeks.

5.0 WORK AND REPORTING SCHEDULE

Duty Post: The contractor shall perform all the work under this activity in Zambia. He following is the tentative work schedule:

Meet with the SO1 team leader and staff and clarify tasks	July 16, 2002
Orientation meeting for Consultants with Strategy Planning Team	July 16, 2002
Establish an implementation plan	July 19, 2002
Presentation and submission of a draft summary report	August 09, 2002
Submit final report to USAID/Zambia	August 16, 2002

Relationships and Responsibilities: The Contractor shall perform the tasks described above under the general guidance of Helen Gunther, Supervisory General Development Officer and SO1 Team Leader.

The SO1 team leader will be assisted by the Agribusiness Specialist in the task of providing oversight management of the consultants.

Logistical Support: The contractor is responsible for providing in-country transportation and secretarial support while in Lusaka. The consultant will also make own field trip travel arrangements. USAID/Zambia or local partners may be consulted on logistics of sourcing field transport. It must be noted that USAID/Zambia will not be able to provide any office space for this assessment.

6.0 DELIVERABLES / PAYMENT TERMS

- A work plan with activities, research questions and roles
- Presentation of the assessment, analysis, findings and conclusions
The presentations will briefly describe the methodology and summarize the preliminary findings, conclusions and recommendations of the work. The consultant will take note of the oral questions and comments from meeting participants. The consultant will then have 3 working days to finalize the report.
- Final Report: After thirty-five (35) working days of contract implementation, the consultant shall deliver the final report to USAID. The final report, not less than forty (40) pages long, excluding attachments, shall address all comments from the review meeting above. Ten (10) hard copies and one (1) electronic copy (1.44" floppy diskette, IBM compatible) of the report must be submitted. Submit copy of final report direct to CDIE.
- The final report shall be concisely written and include an Attractive Cover Page,

Table of Contents, Executive Summary, List of Acronyms, the Main Report in compliance with the Scope of Work, a Statement of Conclusions, a Statement of Recommendations, List of Interviewees, and a list of literature consulted. The body of the report must describe the relevant country context in which the project was developed and carried out, and provide the information on which conclusions and recommendations are based. The report must present quantitative evidence of findings whenever possible using graphs and tables. The section of the report where a results framework is proposed should, in particular, include a graphical representation of the key result and intermediate results.

ANNEX B
SELECTED DOCUMENTS REVIEWED

ANNEX B

SELECTED DOCUMENTS REVIEWED

- Agricultural Consultative Forum, The. 2002. *Enhancement of Stakeholder Consultation as a Key Component of Agricultural Development in Zambia: Proceedings of the Sixteenth Agricultural Consultative Forum*. March.
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ANNEX C
LIST OF PERSONS CONTACTED

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LIST OF PERSONS CONTACTED

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ANNEX D
FOOD SECURITY CONCEPTUAL FRAMEWORK

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USAID defines food security follows:

When all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.

By this definition, food security is a broad and complex concept determined by the interaction of a range of agro physical, socio economic and biological factors. USAID recognizes that in the poorest developing countries, food security for all is a long term objective to be attained through sustained economic growth. The contribution of USAID programs to food security will be greatest if the host country is committed to economic and social policies that promote a broad based pattern of growth.

Like the concepts of health or social welfare, there is no single, direct measure of food security. However, the complexity of the food security problem can be simplified by focusing on three distinct, but inter related dimensions of the concept: food availability, food access and food utilization.

According to the USAID definition:

Food availability is achieved when sufficient quantities of food are consistently available to all individuals within a country. Such food can be supplied through household production, other domestic output, commercial imports or food assistance.

Food access is ensured when households and all individuals within them have adequate resources to obtain appropriate foods for a nutritious diet. Access depends on income available to the household, on the distribution of income within the household and on the price of food.

Food utilization is the proper biological use of food, requiring a diet providing sufficient energy and essential nutrients, potable water and adequate sanitation. Effective food utilization depends in large measure on knowledge within the household of food storage and processing techniques, basic principles of nutrition and proper child care and illness management.

Achieving adequate food security is arguably a necessary first step toward the more general development objectives of improved human well-being, the alleviation of poverty and sustainable, broad based economic growth. In developing a food security strategy incorporating multiple resources, it is important to identify explicitly the linkages between planned activities and their likely impact on the food availability, access and utilization of intended beneficiaries. Beyond the planning stage, however, it is necessary to ensure that for continued U.S. Government support for those activities, programs must

ultimately be able to directly demonstrate their food security impacts on those beneficiaries.

Achieving food security requires that 1.) the aggregate availability of physical supplies of food is sufficient, that 2.) households have adequate access to those food supplies through their own production, through the market or through other sources, and that 3.) the utilization of those food supplies is appropriate to meet the specific dietary needs of individuals.

Impacts of a strategy may be defined as intermediate improvements in the capability of program beneficiaries to influence their own lives, such as through improved access to resources, or improved knowledge attained through training programs. More typically, impacts may also refer to final improvements in the economic and personal well being of individuals who receive goods and services through the program. Impacts are not to be confused with program outputs, which refer to the quality and quantity of goods and services delivered through program activities.

In deciding what aspects of food security to tackle, it is important for a USAID Mission to identify those activities that are in its manageable interest and recognize that such a complex problem requires multiple actions by many partners including the Government, PVOs, the private sector, and the community.

Table D.1 on the next page shows in schematic form a cross-cutting approach to food security for USAID/Zambia.

Table D.1 How USAID/Zambia's Areas of Emphasis (existing SOs) Might Address the Three Primary Dimensions of Food Security

	<u>Access</u> (to food, through efficient markets, or to adequate income to purchase food)	<u>Availability</u> (of food, whether produced or imported)	<u>Utilization</u> (assure the body maximizes biophysical utilization of food that is available and/or to which one has access)
Agr/NR/Pvt Sector	Improve marketing; Increase income – microenterprise, microfinance; Improve enabling environment for trade & investment.	Increase domestic production and transformation in a sustainable manner (thus NRM)	
Health/Pop Nutrition			Improve biophysical utilization through decreasing morbidity and improving micronutrients intake.
Basic Education	Increase citizens' opportunities for employment and income.		School health & nutrition (SHN) program, including deworming, improves nutrition and biophysical utilization
Democracy/ Governance	Stable, transparent government decreases risk to trade & investment and promotes a more level playing field for economic actors.		